

Ford Motor Company

**Supplemental Reconnaissance
Summary Report**

Ringwood Mines/Landfill Superfund Site

Ringwood, New Jersey

June 2015



A handwritten signature in blue ink, appearing to read "Deric Kearns", written over a horizontal line.

Deric Kearns
Associate Project Manager

A handwritten signature in blue ink, appearing to read "Michael Kleczkowski", written over a horizontal line.

Michael Kleczkowski, P.E.
Principal Engineer/Project Manager

Supplemental Reconnaissance Summary Report

Ringwood Mines/Landfill
Superfund Site
Ringwood, New Jersey

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Ford Motor Company

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Our Ref.:
NJ000604.2014.00015

Date:

June 2015

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1. Introduction

ARCADIS U.S., Inc. (ARCADIS), on behalf of Ford Motor Company (Ford), has prepared this *Supplemental Reconnaissance Summary Report* (Report) for the Ringwood Mines/Landfill Superfund Site located in the Borough of Ringwood in Passaic County, New Jersey (Site; Figure 1).

In April 2013, additional dried paint waste was discovered in an area south of Margaret King Avenue near the intersection of Peter's Mine Road—this area is referred to as removal area SR-16. ARCADIS prepared a *Supplemental Reconnaissance Survey Work Plan* (Work Plan; ARCADIS 2013) describing the scope of work proposed to:

- delineate the extent of paint waste at SR-16 and evaluate fill materials identified within this area via test trenches;
- perform a targeted removal of waste identified;
- perform a desktop survey designed to identify areas where, based on topographic comparisons, the ground surface was disturbed (and could possibly contain paint waste); and
- Visually assess and inspect the remaining areas located to the south of Margaret King Avenue, formerly owned by Ford Motor Company via a systematic field reconnaissance survey.

The United States Environmental Protection Agency (USEPA) approved the Work Plan on October 22, 2013. An *Addendum to the Supplemental Reconnaissance Work Plan*, (Work Plan Addendum; ARCADIS 2014) was prepared to outline the scope of work for additional test trenches requested by USEPA per the preliminary findings of the field reconnaissance survey. USEPA approved the Work Plan Addendum on June 4, 2014 (USEPA 2014).

This Report summarizes the activities completed per the Work Plan, including the completion of the desktop study and the field reconnaissance survey.

1.1 Site Description

The Site is approximately 500 acres in size, is 0.5 miles wide, and approximately 1.5 miles long. A reconnaissance survey was completed in the portion of the Site north of

Margaret King Avenue in 2004 and resulted in the removal of approximately 50,000 tons of primarily impacted soil and paint waste between 2004 and 2012. The area subject to the supplemental reconnaissance work is the area south of Margaret King Avenue (the study area; Figure 2). Figure 2 also shows the location of SR-16.

1.2 Report Organization

The remainder of this Report is organized as follows:

- Section 2 Desktop Survey – describes the methodology used to complete the desktop survey and the key findings.
- Section 3 Supplemental Field Reconnaissance – describes the methodology used to complete the field reconnaissance survey and the associated results including observations of paint waste and other data gathered.
- Section 4 Summary and Conclusions – presents a summary of the work and key conclusions about the data and acquired information.
- Section 5 References – lists documents used in preparation of this Report.

The field activities were completed as described in the USEPA-approved Work Plan and Work Plan Addendum (ARCADIS 2013, 2014). ARCADIS completed these activities between April 2014 and December 2014 with support from a surveying contractor and assistance from local Ramapough Lenape Nation residents familiar with the area.

2. Desktop Survey

The purpose of the desktop survey was to identify and map disturbed areas, depressions, and access roads before, during, and after the 1965 to 2003 timeframe and evaluate those areas identified during the supplemental field reconnaissance, where possible, given access limitations. This section describes how the desktop survey was completed and presents key findings that aided in the completion of the field reconnaissance.

2.1 Methodology

The desktop survey focused on information relevant to the period of Ringwood Realty's ownership of the Site (1965 to 1973), as well as to the period between 1974 through 2003 as work at the Site to date has indicated that reworked fill materials may have been transported around the Site subsequent to Ford's ownership. The study targeted:

- Depressions present at or about the time Ringwood Realty purchased the Site (1965) and during the period of Ringwood Realty ownership (between 1965 and 1973);
- Areas that appear to have been disturbed between 1974 through 2003; and
- Road shoulders, level areas and ravines adjacent to roadways present and accessible during the Ringwood Realty ownership period.

ARCADIS completed the following steps to gather this information:

- Identify and Map Disturbed Areas from Aerial Photographs - disturbed areas (e.g., areas that appear to have been cleared and/or filled) that existed prior to, during and/or after the conclusion of Ringwood Realty's ownership were mapped based on 1965, 1966, 1971, 1975, 1979, 1987 and 1995 aerial photographs of the Site. Identify and Map Period Access Roads from Aerial Photographs - access roads that existing during or after the time of Ringwood Realty's ownership.
- Map Level Areas along Access Roads – includes areas adjacent to access roads that existed during the period of Ford's ownership, and that are sufficiently level for a waste hauling truck to have accessed.
- Map Ravines along Access Roads - ravines represent areas where waste could have been dumped at the edge of an access road or level area and subsequently flowed or rolled down slope.

In addition, GEOD Companies digitally compared three topographic maps from 1961, 1974, and 2003 to identify areas of cut and fill in the study area.

2.2 Findings

Eight aerial photographs dated 1965, 1966, 1971, 1975, 1979, 1987, 1995, and 2006 were purchased from HistoricalAerials.com and were used to identify disturbed areas that existed prior to, during, and/or after the period of ownership by Ringwood Realty. The aerial photographs are provided as Figures 3 through 10. Figures 11 and 12 present topographic comparisons between 1961 and 1974 and 1974 and 2003, respectively. The observations from review of the aerial maps and the topographic comparisons are summarized in Table 1.

As shown on Table 1, several areas of cut and fill, potential access roads, and possible grading were identified during the desktop survey. Where possible (i.e., where access was granted by property owners), these observations were investigated in the field during the supplemental field reconnaissance (i.e., the advancement of hand augers). The observations from the field reconnaissance, described in more detail in Section 3, are also presented in Table 1. All other areas were inspected during the spring 2014.

3. Supplemental Field Reconnaissance

ARCADIS began the process of obtaining access to private properties for the field reconnaissance survey in June 2013 and completed a large portion of the field work for the supplemental field reconnaissance between April 2 and May 9, 2014. Access agreements for Lots 2.29 and 2.30 were subsequently obtained in June 2014. However, overgrown vegetative conditions and access limitations precluded the field reconnaissance survey from being conducted until December 2014.

The field reconnaissance work conducted on all properties where access was granted included:

- Conducting field reconnaissance activities
 - Level 1 field reconnaissance (Figure 2), which included a visual screening level reconnaissance at ground surface, was completed for parcels in the study area that provided secured legal access.
 - Level 2 field reconnaissances (Figure 2), which involved a more detailed survey (subsurface investigation at predetermined locations) to access conditions near SR-16 and along Margaret King Avenue, was completed over

the area generally located between Mine Run Brook and Margaret King Avenue.

- Observations recorded during the field reconnaissance included:
 - Presence of paint waste;
 - Presence of surface debris and, presence or absence of readily discernible fill material;
 - Presence of historical building foundations;
 - Presence of topographic conditions indicating potential disturbance or the presence of fill;
 - Results of hand auger/shovel inspection (if completed due to observations in the field); and
 - Survey point coordinates.

3.1 Access Agreements

ARCADIS distributed letters and access agreements to all properties in the study area (Figure 2). The first round of letters was distributed in June 2013 and follow up contact was made to property owners for whom phone numbers and/or email addresses could be obtained. In August 2013, ARCADIS staff visited several properties in an attempt to make contact with the property owners and was successful in obtaining access to several properties. In August 2013 and October 2013, ARCADIS resent letters and access agreements to those properties where signed access had not been obtained. In November 2013, USEPA also sent letters to properties where access had not been obtained. In June 2014, letters were resent to two properties for which the Borough of Ringwood obtained new contact information. Both owners (Lots 2.29 and Lot 2.30) agreed to access. As noted previously, field reconnaissance work at these two properties was later completed in December 2014 due to the overgrown vegetative conditions at the time access was obtained. These outreach efforts were successful in gaining access to 25 of 37 properties located within the targeted study area outlined in the Work Plan.

3.2 Field Reconnaissance Survey

ARCADIS performed two levels (Level 1 and Level 2) of a field reconnaissance survey within the areas identified on Figure 2 to confirm the location of previously identified paint waste within SR-16 and to evaluate whether paint waste may be present within other areas south of Margaret King Avenue. The field reconnaissance survey covered the entirety of the properties surveys and included the visual inspection of areas where paint waste has reportedly been disposed and where Site features suggest that previous disposal activities may have occurred.

Both levels of the field reconnaissance survey identified and evaluated the following conditions:

1. The locations where there is evidence of soil or other waste material deposition, or mounded terrain; and
2. The locations where there is no evidence of past waste disposal activities (e.g., the ground appears undisturbed).

Prior to initiating the field reconnaissance survey, 50-foot survey lines were overlaid on a digital satellite image of each property. The survey lines and property lines of each lot were calibrated to global positioning system (GPS) coordinates. All of the satellite images were then transferred to electronic field tablets. Backpack Trimble® GPS units were synced with each respective field tablet. This provided real-time GPS coordinates to the user of the field tablets. The user was able to pull up a satellite image of the lot and compare their location (displayed as a blue dot) on the image to the location of the predetermined survey lines and adjust accordingly. This feature was crucial to ensuring the survey lines were accurately followed and that survey teams did not encroach upon property lines that had not provided access to ARCADIS.

Survey teams made up of ARCADIS staff and members of the Ramapough Lenape Nation who reside in the area and are familiar with the local terrain were trained to visually recognize paint waste, disturbed vegetation, and suspect terrain.

Survey teams walked the survey lines, observing conditions along and between survey lines and recorded locations of paint waste, other waste, or suspect terrain. All features described below were logged, photographed, and the GPS coordinates were recorded using the field tablets. All field tablets were operated by trained ARCADIS staff that led each survey team. The teams verified the accuracy of the GPS each day

by comparing a GPS-computed location with coordinates of a pre-surveyed location. Data recorded during the field reconnaissance survey on the field tablets were uploaded to a project server directory at the end of each day and reviewed for accuracy and tracking purposes

3.2.1 Level 1 Field Reconnaissance

ARCADIS performed a visual (screening-level) field reconnaissance survey over all areas not identified as Level 2 (L2) on Figure 2. The ground surface at the Level 1 Area was evaluated visually to look for suspect areas to examine further. While walking the survey lines the field teams observed conditions along the survey line and between survey lines. Teams marked and logged the beginning and end of each survey line (nodes) to establish that specific line/area has been walked and logged. For areas where paint waste or other wastes were identified or site features such as mounded terrain indicated the potential presence of paint waste or at areas of grade changes as supported by the desk top study, near-surface soil conditions were further assessed by probing the soil 0 to 24 inches below ground surface (bgs) via the use of a stainless steel hand auger or soil sample corer or shovel. Observations were recorded and all areas were logged with the GPS/data-logger in addition to the beginning and ending points of the survey line.

3.2.2 Level 2 Field Reconnaissance

The Level 2 area was the focus study area near SR-16, identified on Figure 2 as the area between Mine Run Brook and Margaret King Avenue. Paint waste was visually identified within fill materials in this area, and based on the historical aerials, much of the ground at this location appeared to have been filled at one time. While it did not appear that paint waste or impacted fill materials extended down slope to Mine Run Brook, the detailed survey conservatively extended to the water's edge in this area.

As with the Level 1 survey, 50-foot interval survey lines were established on a digital map of each unit. As the survey teams walked the survey lines, spaced 50 feet apart, the team stopped every 25 feet along the survey line at predetermined locations to access ground and subsurface conditions and logs of each location with the field tablets. Data collected at each node included physical attributes and site characteristics as defined in a preset code list of possible site characteristics.

3.3 Field Reconnaissance Findings

During the supplemental field reconnaissance, 1,375 points were logged in the Level 1 area and 525 points were logged in the Level 2 area (as defined in the Work Plan). In Level 1, the locations of lot lines and buildings, disturbed ground (i.e., slighted mounded and/or depressed terrain), surface refuse, and paint waste are shown on Figures 13 through 16. Level 2 observations are shown on Figure 17.

Paint chips were observed at 10 points in the Level 1 survey area and at 17 points in Level 2 (Figures 17). The dried paint waste pieces in these areas were picked up by field crews and were later disposed off-site during subsequent soil disposal activities for the SR-16 area, as described in a separate report. The number of observations of paint waste and other key observations is summarized below:

Observation Type	Level 1	Level 2
Total Sample Points	1,334	525 ¹
Disturbed Ground	889	173
Surface Refuse	435	350
Paint chips	10	17 ²

¹ Some Level 2 locations may have had more than one observation recorded (e.g., disturbed ground and surface refuse at one point) and the total for Level 2 does not equal the sum of the specific observations. For Level 1, sample points were not preset and observations were made as the survey progressed.

² Larger pieces or flows of paint were observed in the SR-16 area only.

As summarized above, paint chips were found at a small number of the sample points (less than 1% in Level 1 and 3% in Level 2). Observations of disturbed ground (i.e., slightly mounded and/or depressed terrain) and surface refuse were much more common. In Level 1, the areas where paint waste, disturbed ground, or surface refuse¹ were examined further by probing with a hand auger to evaluate subsurface condition and determine whether paint waste was present below the subsurface. The field

¹ Surface refuse included household trash, construction materials, automotive parts, plastic, wood, and other debris.

reconnaissance data are included in Appendix A and photographs are included in Appendix B.

4. Summary and Conclusions

With the exception of the eastern portion of the SR-16 area where dried surficial paint waste pieces were identified, the completed field reconnaissance activities have confirmed that the remaining properties covered throughout this survey do not have indications of paint waste requiring additional investigation or remediation.

5. References

ARCADIS. 2013. Supplemental Reconnaissance Survey Work Plan. August 2013.

ARCADIS. 2014. Addendum to the Supplemental Reconnaissance Work Plan. May 2014.

USEPA. 2014. Letter Regarding June 2014 Addendum to the Supplemental Reconnaissance Survey Work Plan.

Tables

Table 1 - Summary of 2014 Desktop Field Reconnaissance Survey Results
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Privileged and Confidential
Prepared at Request of Counsel

Map ID	Lot ²	Access Agreement in Place	Topographic Map Comparison & Aerial Photo Observations ¹					Field Reconnaissance	
			1961 vs. 1974 1974 vs. 2003					Paint Sludge Present	Drums Present
			Cuts/Grading <i>shown in yellow/orange on maps</i>	Fill <i>shown in blue/purple on maps</i>	Access Road	Pre-1974 Cut/Fill	Details		
D	Lot 1	3	3	3	3	3	<ul style="list-style-type: none"> ▪ 1-10 feet of cut observed - Located northeast of Lot 2.20 (1961 vs 1974). ▪ 1-10 feet of fill observed - Located northeast of Lot 2.20 (1974 vs 2003). ▪ Both fill and cut areas are the same shape, which may reflect variations in data measurements used to generate the contours and not fill/cutting. 	No	No
H	Lot 2	3		3	3		<ul style="list-style-type: none"> ▪ Same observations as Lot 1. ▪ 1-10 feet of fill material in southwestern corner of lot is where access path for pipeline was constructed (1974 vs 2003). 	No	No
S	Lot 2.01	3	3	3		3	<ul style="list-style-type: none"> ▪ 1-10 feet of cut and fill noted across most of lot. Appears to be a result of grading for site development (1961 vs 1974). 	No	No
AA	Lot 2.02		3	3		3	<ul style="list-style-type: none"> ▪ Cut and fill noted across most of lot. Appears to be a result of grading for site development (1961 vs 1974). ▪ A possible access road to lot 2.03 is visible to the east of this lot on both comparison maps. Access road is also visible on aerial maps. 	N/A	N/A

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Ringwood, New Jersey

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Map ID	Lot ²	Access Agreement in Place	Topographic Map Comparison & Aerial Photo Observations ¹					Field Reconnaissance	
			1961 vs. 1974 1974 vs. 2003					Paint Sludge Present	Drums Present
			Cuts/Grading <i>shown in yellow/orange on maps</i>	Fill <i>shown in blue/purple on maps</i>	Access Road	Pre-1974 Cut/Fill	Details		
AB	Lot 2.03		3	3	3	3	<ul style="list-style-type: none"> ▪ Large areas of cut (1-10 feet and 10-20 feet) and fill (1-10 feet) are observed across the lot (1961 vs 1974). ▪ Large areas of cut (1-10 feet) and fill (1-10 feet) are observed across the lot, similar in size to 1961 vs 1974 topo comparison ('74 to '03). ▪ No structures appear to have been constructed between 1965 and 2006. ▪ Disturbances were first noted in the 1971 aerial and increased in size through the 1995 aerial photograph. ▪ Vegetation gradually began to fill in disturbed areas in 2006. ▪ Multiple access roads are present across lot. In the 1979, 1987, and 1995 aerial photographs, multiple paths within the disturbed area as well as a potential access road originating from Lots 2.02 and 2.12 are 	N/A	N/A
R	Lot 2.05	3	3	3		3	<ul style="list-style-type: none"> ▪ Small area of 1-10 feet of fill observed (1961 vs 1974). ▪ Small area of 1-10 feet of cut observed (1974 vs 2003). 	No	No
I	Lot 2.06	3	3	3	3	3	<ul style="list-style-type: none"> ▪ A potential access road cutting through this lot is visible, leading into Lots 2.16 , 2.17, 2.18 , and 2.11. ▪ Minor area of cutting is visible off of road (1961 vs 1974). ▪ 1-10 feet of cut and fill noted across most of lot. Appears to be a result of grading for site development (1974 vs 2003). 	No	No

Table 1 - Summary of 2014 Desktop Field Reconnaissance Survey Results
Ringwood Mines/Landfill Site
Ringwood, New Jersey

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Map ID	Lot ²	Access Agreement in Place	Topographic Map Comparison & Aerial Photo Observations ¹					Field Reconnaissance	
			1961 vs. 1974 1974 vs. 2003					Paint Sludge Present	Drums Present
			Cuts/Grading <i>shown in yellow/orange on maps</i>	Fill <i>shown in blue/purple on maps</i>	Access Road	Pre-1974 Cut/Fill	Details		
A	Lot 2.07	3	3	3	3	3	<ul style="list-style-type: none"> ▪ A potential access road cutting through this lot is visible, leading into Lots 2.16 , 2.17, 2.18, and 2.11. Minor area of fill and cutting is visible off of road (1961 vs 1974). ▪ 1-10 feet cut and fill noted across most of lot. Appears to be a result of grading for site development (1974 vs 2003). 	No	No
B	Lot 2.12	3	3	3	3		<ul style="list-style-type: none"> ▪ An access road is visible cutting across the lot. Minor areas of fill are observed (1974 vs 2003). ▪ 1-10 feet and 10-20 feet of cut and fill noted across most of lot. Appears to be a result of grading for site development (1974 vs 2003). 	No	No
E	Lot 2.14	3	3	3			<ul style="list-style-type: none"> ▪ A large area of cut and fill (1-10 and 10-20 feet) can be seen within the center of the lot (1974 vs 2003) ▪ Noticeable clearing was also noted in the 1987 aerial. The clearing appears to expand slightly in the 1995 aerial. 	Yes ³	No
N	Lot 2.22	3	3	3	3	3	<ul style="list-style-type: none"> ▪ 1-10 feet of fill material is visible at end of access road (1961 vs 1974). ▪ 1-10 feet of cut and fill noted across most of lot. Appears to be a result of grading for site development (1974 vs 2003). 	No	No
AG	Lot 2.23			3	3		<ul style="list-style-type: none"> ▪ 1-10 feet of fill material is visible at end of access road (1961 vs 1974). ▪ 1-10 feet of fill material is visible across additional portions of lot (1974 vs 2003). 	N/A	N/A

Table 1 - Summary of 2014 Desktop Field Reconnaissance Survey Results
Ringwood Mines/Landfill Site
Ringwood, New Jersey

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Map ID	Lot ²	Access Agreement in Place	Topographic Map Comparison & Aerial Photo Observations ¹					Field Reconnaissance	
			1961 vs. 1974 1974 vs. 2003					Paint Sludge Present	Drums Present
			Cuts/Grading <i>shown in yellow/orange on maps</i>	Fill <i>shown in blue/purple on maps</i>	Access Road	Pre-1974 Cut/Fill	Details		
AE	Lot 2.25			3	3		<ul style="list-style-type: none"> A large area of fill (1-10 feet and 10-20 feet) can be seen in the west corner of lot (1974 vs 2003). 	N/A	N/A
AD	Lot 2.29	3	3		3	3	<ul style="list-style-type: none"> A large area of fill (approximately 1 to 10 feet thick) in the south portion of lot can be seen extending into lot 2.03 (1961 vs 1974). Multiple access roads are visible throughout lot. A large area of fill, 20 to 30 feet in thickness, is visible in the southeast corner of Lot 2.29, extending into Lot 2.34 (1974 vs 2003). The 1995 aerial image shows disturbance to approximately 50% of this lot. 	No	No
AF	Lot 2.30	3	3	3	3	3	<ul style="list-style-type: none"> A small area 1 to 10 feet of cut can be seen in the center of the lot (1961 vs 1974). 1-10 feet of cut and fill noted across most of lot. Appears to be a result of grading for site development (1974 vs 2003). 	No	No
Q	Lot 2.34	3		3			<ul style="list-style-type: none"> 1-10 feet of fill material is visible in the southeastern portion of the lot (1974 vs 2003). 	No	No
F	Lot 3	3	3				<ul style="list-style-type: none"> 1-10 feet of cut material is visible within the lot (1974 vs 2003). 	Yes ³	No
J, L, U, AC	Lots 2.04, 2.08, 2.09, 2.10, 2.26, 2.27, 2.28	Varies	3	3			<ul style="list-style-type: none"> All of these lots show cut and fill (1-10 feet). Appears to be related to building construction/site development (1974 vs 2003). 	No	No

Notes:

¹ Aerial Photographs reviewed include; 1965, 1966, 1971, 1975, 1979, 1987, 1995, and 2006.

² All lots are in Block 508.

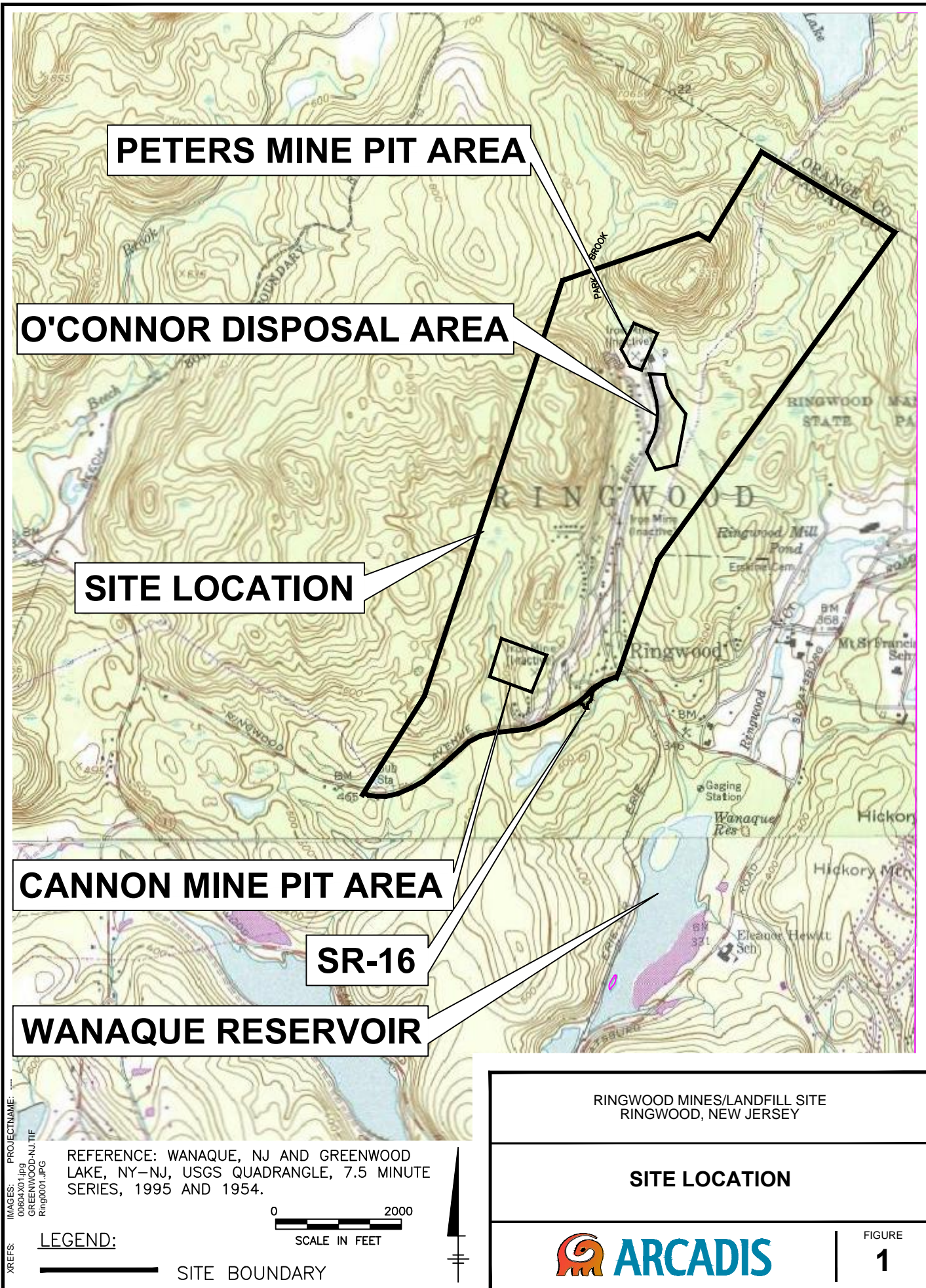
³ Areas where paint waste was observed were addressed through additional test pits and paint waste removal.

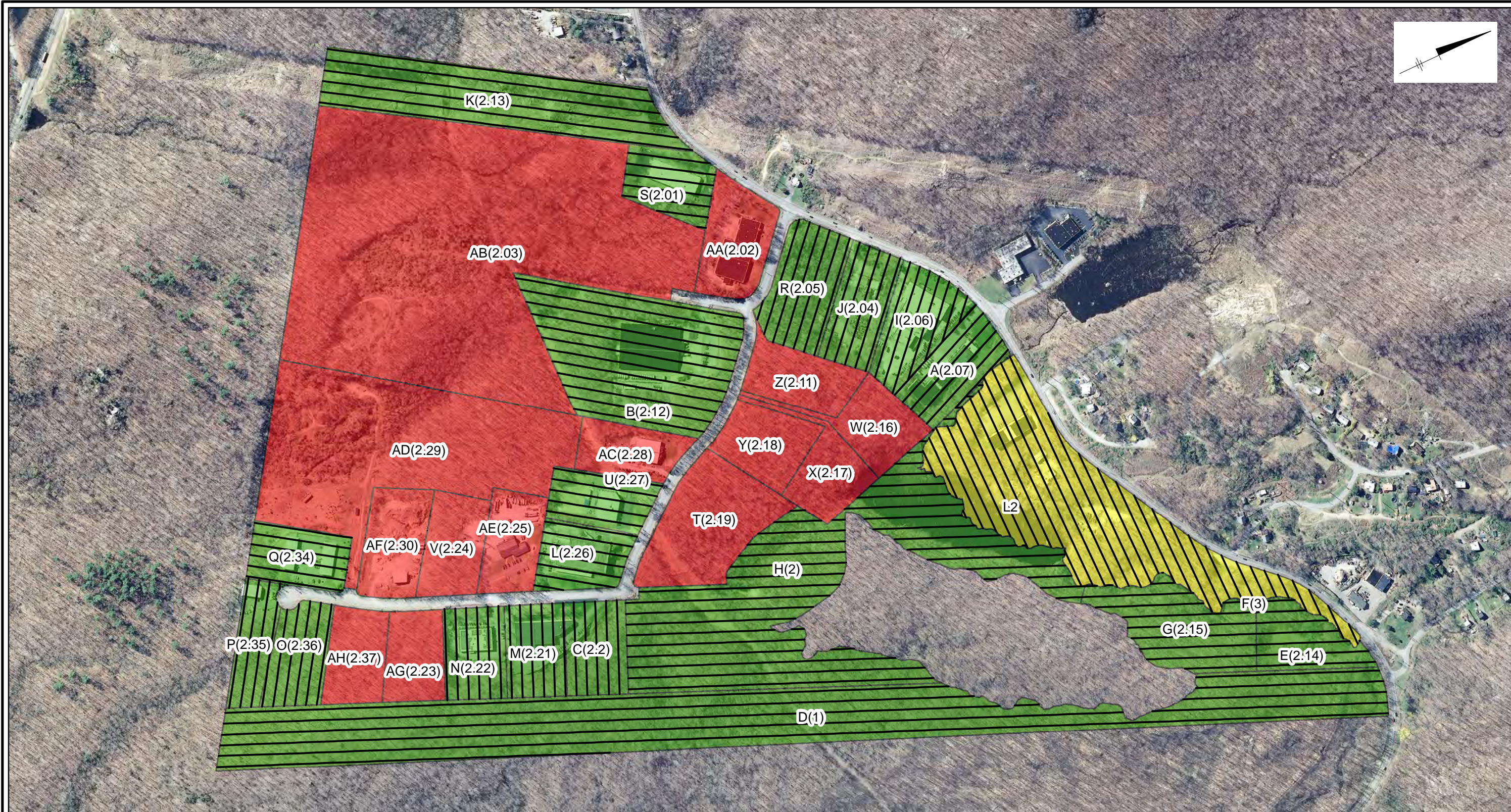
N/A- Not applicable, access not granted to these properties and field reconnaissance wasn't completed.

The term "large area" means greater than 50% of parcel area.

Bold text indicated pre-1974 cut and/or fill.

Figures





LEGEND:

- LOT GRID LINES
- LEVEL 1 RECON SURVEY COMPLETED 4/28/14
- LEVEL 2 RECON SURVEY COMPLETED 5/9/14
- NO ACCESS



- NOTES:
1. 2012 AERIAL IMAGE, NEW JERSEY GEOGRAPHIC INFORMATION NETWORK
 2. LOT NUMBERS ARE INCLUDED IN PARENTHESES; ALL LOTS ARE IN BLOCK 508

RINGWOOD MINES/LANDFILL SITE
RINGWOOD, NEW JERSEY

STUDY AREA

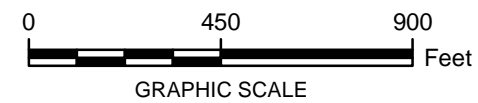


FIGURE
2



LEGEND:

 LOT BOUNDARY



NOTES:

1. 2.13 - LOT NUMBER (ALL LOTS ARE IN BLOCK 508)

RINGWOOD MINES/LANDFILL SITE
RINGWOOD, NEW JERSEY

1965 AERIAL PHOTOGRAPH

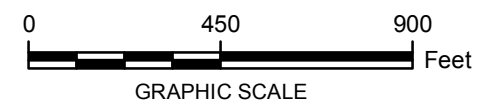


FIGURE
3



LEGEND:

 LOT BOUNDARY



NOTES:

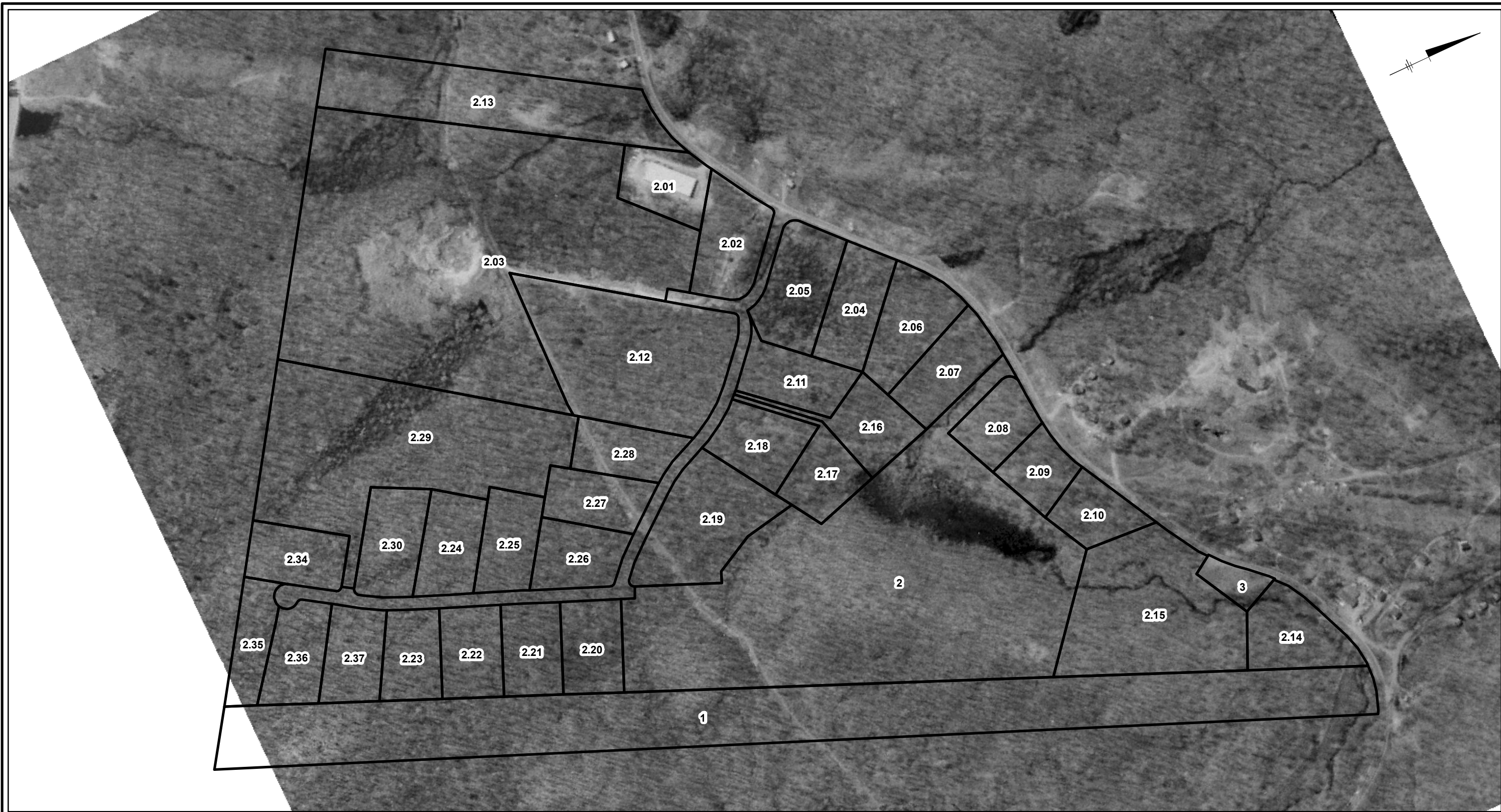
1. 2.13 - LOT NUMBER (ALL LOTS ARE IN BLOCK 508)

RINGWOOD MINES/LANDFILL SITE
RINGWOOD, NEW JERSEY

1966 AERIAL PHOTOGRAPH

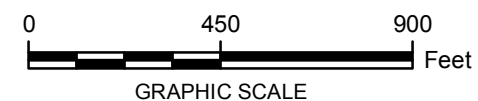


FIGURE
4



LEGEND:

 LOT BOUNDARY



NOTES:

1. 2.13 - LOT NUMBER (ALL LOTS ARE IN BLOCK 508)

RINGWOOD MINES/LANDFILL SITE
RINGWOOD, NEW JERSEY

1971 AERIAL PHOTOGRAPH

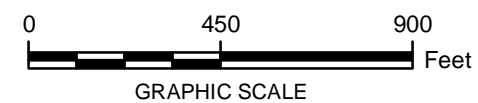


FIGURE
5



LEGEND:

 LOT BOUNDARY



NOTES:

1. 2.13 - LOT NUMBER (ALL LOTS ARE IN BLOCK 508)

RINGWOOD MINES/LANDFILL SITE
RINGWOOD, NEW JERSEY

1975 AERIAL PHOTOGRAPH



FIGURE
6



LEGEND:

 LOT BOUNDARY

0 450 900
Feet
GRAPHIC SCALE

NOTES:

1. 2.13 - LOT NUMBER (ALL LOTS ARE IN BLOCK 508)

RINGWOOD MINES/LANDFILL SITE
RINGWOOD, NEW JERSEY

1979 AERIAL PHOTOGRAPH



FIGURE
7



LEGEND:
LOT BOUNDARY

0 450 900
Feet
GRAPHIC SCALE

NOTES:
1. 2.13 - LOT NUMBER (ALL LOTS ARE IN BLOCK 508)

RINGWOOD MINES/LANDFILL SITE
RINGWOOD, NEW JERSEY

1987 AERIAL PHOTOGRAPH

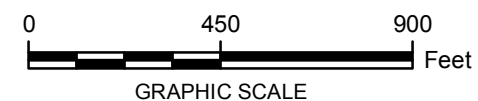


FIGURE
8



LEGEND:

 LOT BOUNDARY



NOTES:

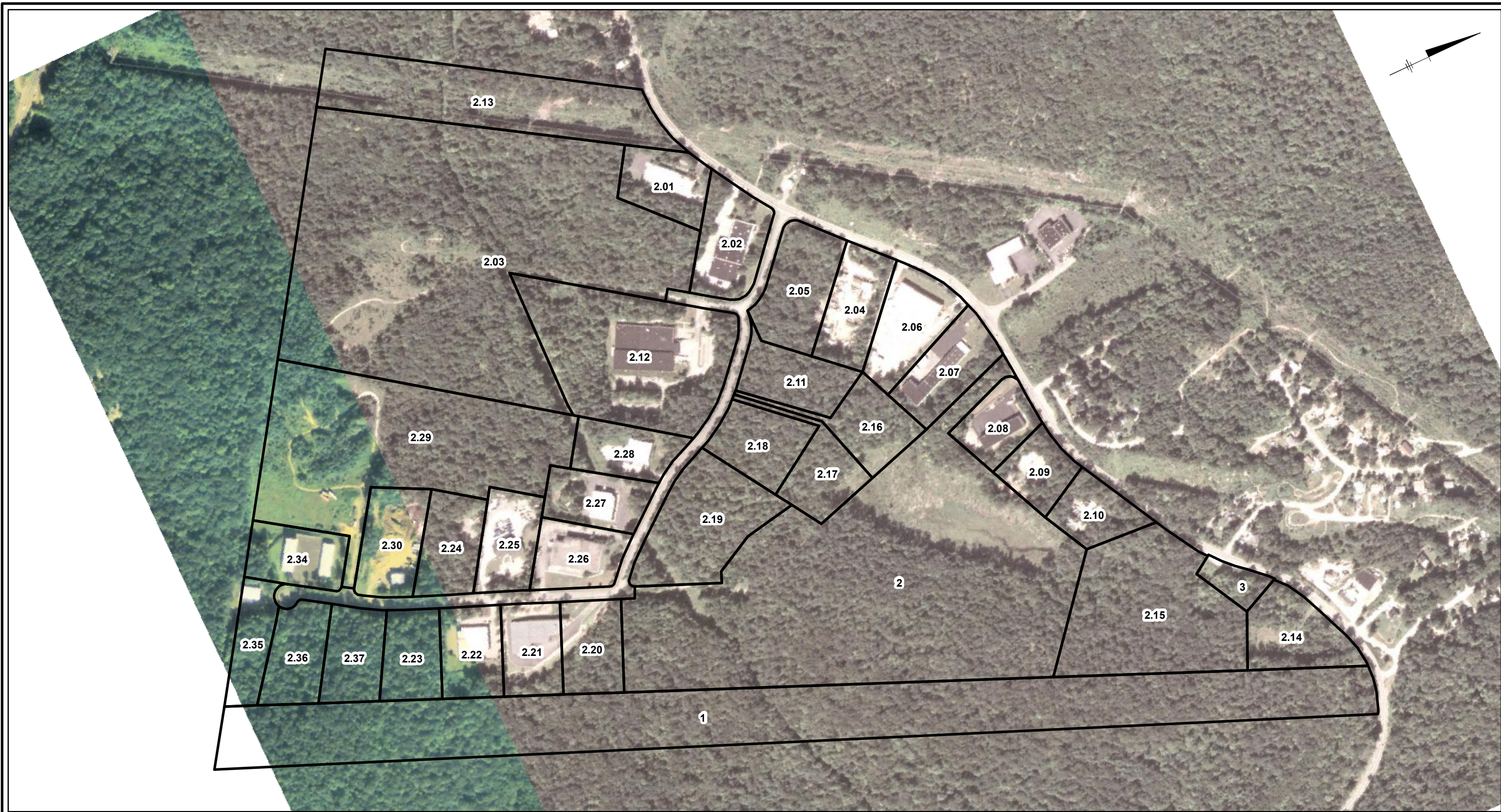
1. 2.13 - LOT NUMBER (ALL LOTS ARE IN BLOCK 508)

RINGWOOD MINES/LANDFILL SITE
RINGWOOD, NEW JERSEY

1995 AERIAL PHOTOGRAPH

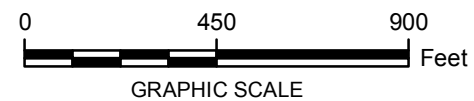


FIGURE
9



LEGEND:

 LOT BOUNDARY



NOTES:

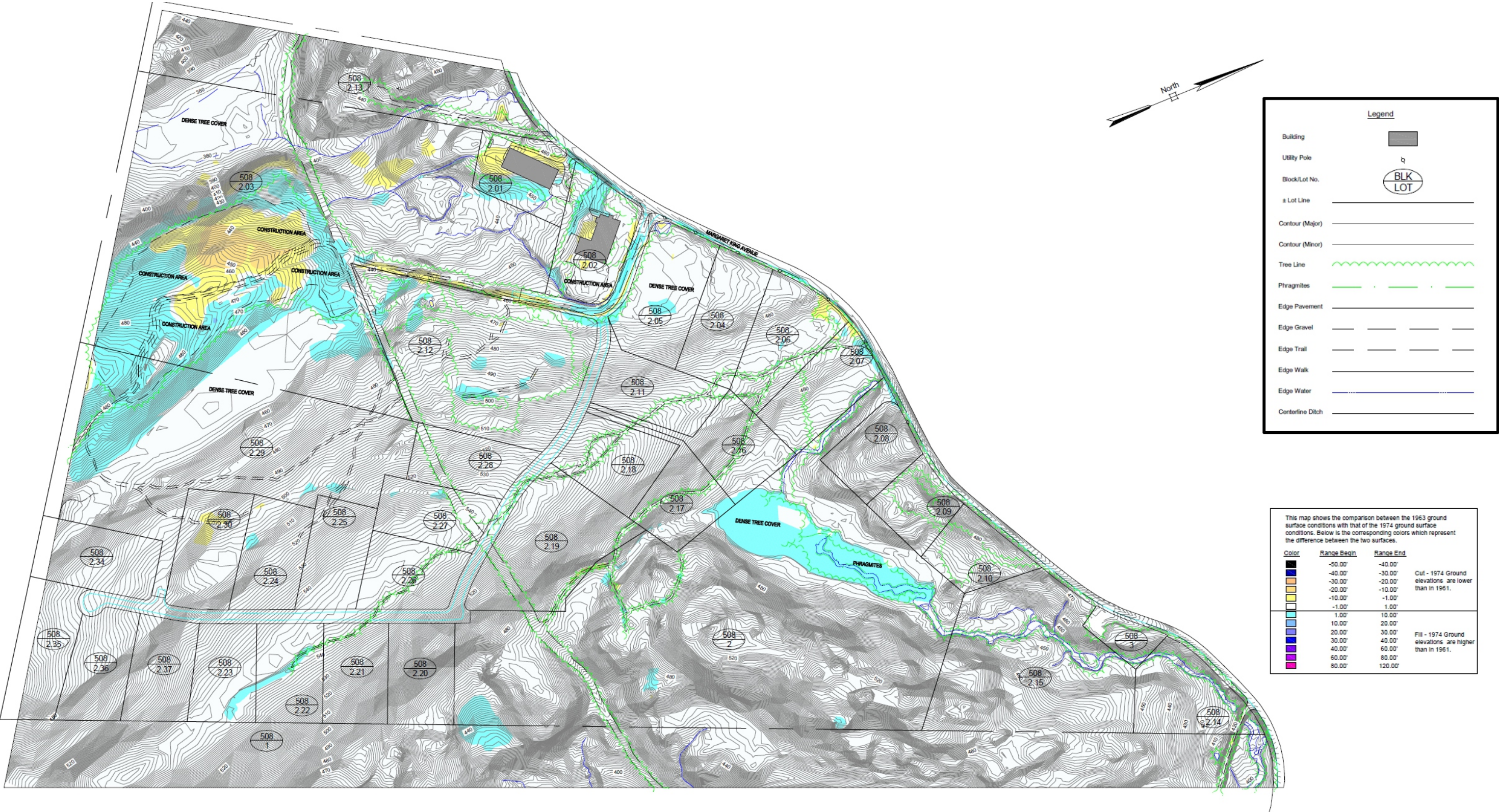
1. 2.13 - LOT NUMBER (ALL LOTS ARE IN BLOCK 508)

RINGWOOD MINES/LANDFILL SITE
RINGWOOD, NEW JERSEY

2006 AERIAL PHOTOGRAPH



FIGURE
10

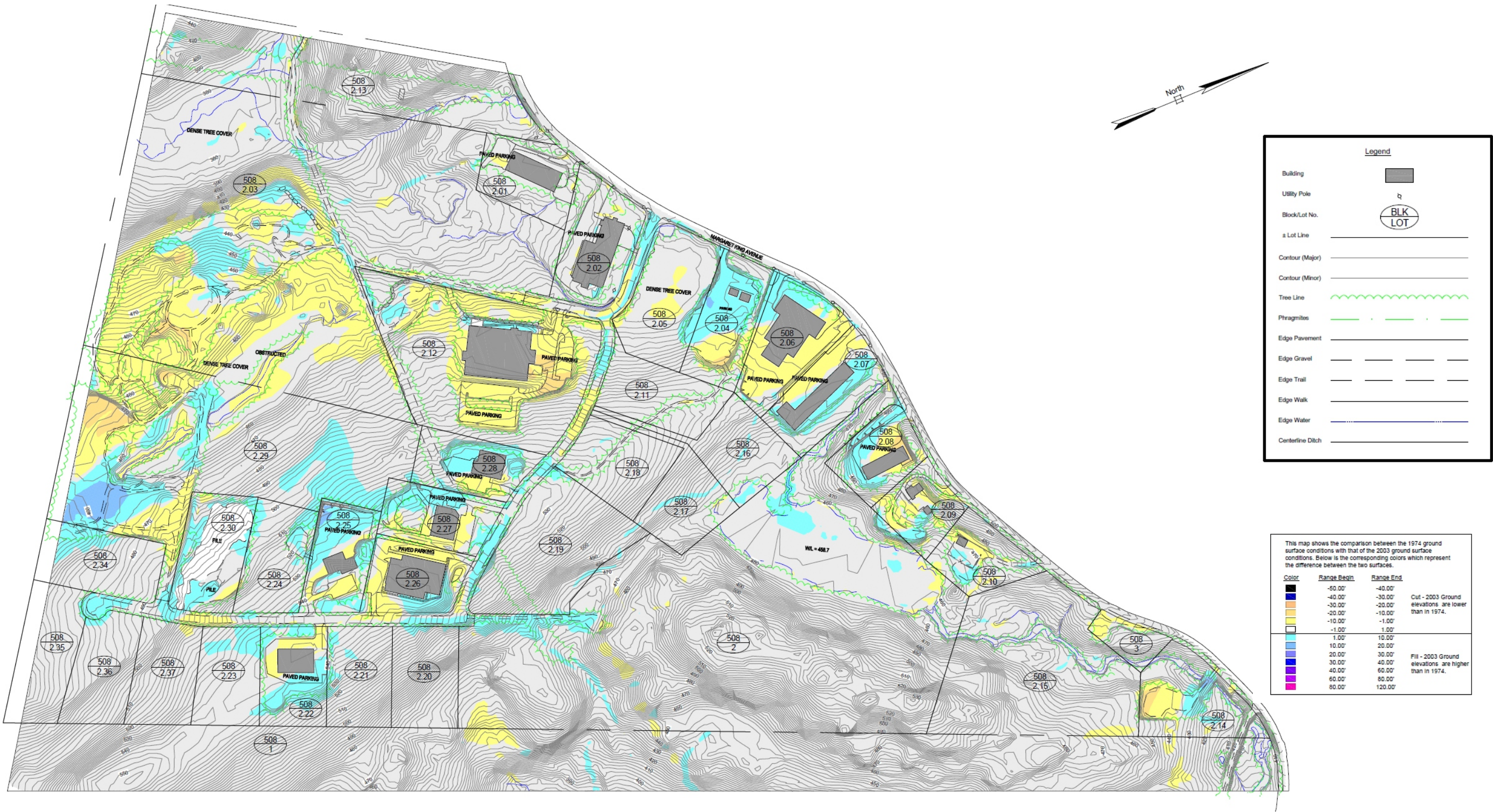


Note: Figure prepared by GEOD Corporation

RINGWOOD MINES/LANDFILL SITE
RINGWOOD, NEW JERSEY

1961 and 1974 TOPOGRAPHIC
COMPARISON

FIGURE
11



Note: Figure prepared by GEOD Corporation

RINGWOOD MINES/LANDFILL SITE
RINGWOOD, NEW JERSEY

1974 and 2003 TOPOGRAPHIC
COMPARISON


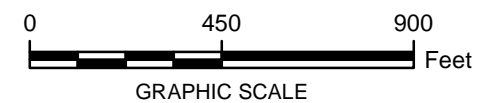


FIGURE
12



LEGEND:

- | | | | |
|---|-----------------|---|---|
| ■ | BUILDINGS | ■ | LEVEL 1 RECON SURVEY COMPLETED 12/17/14 |
| ▲ | LOT COORDINATES | ■ | LEVEL 2 RECON SURVEY COMPLETED 5/9/14 |
| — | LOT GRID LINES | ■ | NO ACCESS |



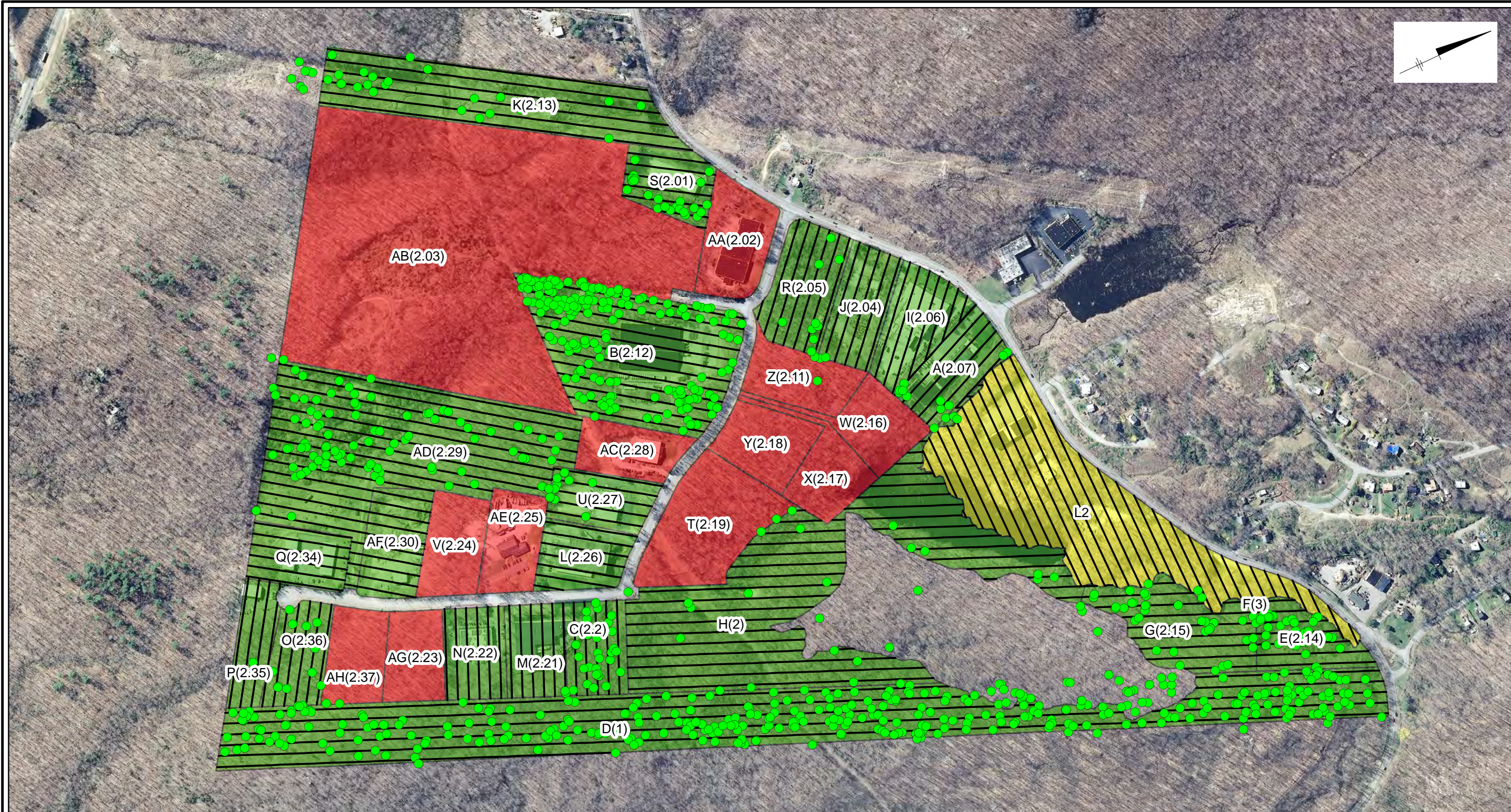
- NOTES:
1. 2012 AERIAL IMAGE, NEW JERSEY GEOGRAPHIC INFORMATION NETWORK
 2. LOT NUMBERS ARE INCLUDED IN PARENTHESES; ALL LOTS ARE IN BLOCK 508

RINGWOOD MINES/LANDFILL SITE
RINGWOOD, NEW JERSEY

**LEVEL 1 RECON
LOT COORDINATES AND BUILDINGS**



FIGURE
13



LEGEND:

- CONFIRMATORY HAND AUGER LOCATION
NO DRIED PAINT PIECES ENCOUNTERED
- LOT GRID LINES
- LEVEL 1 RECON SURVEY COMPLETED 12/17/14
- LEVEL 2 RECON SURVEY COMPLETED 5/9/14
- NO ACCESS



NOTES:

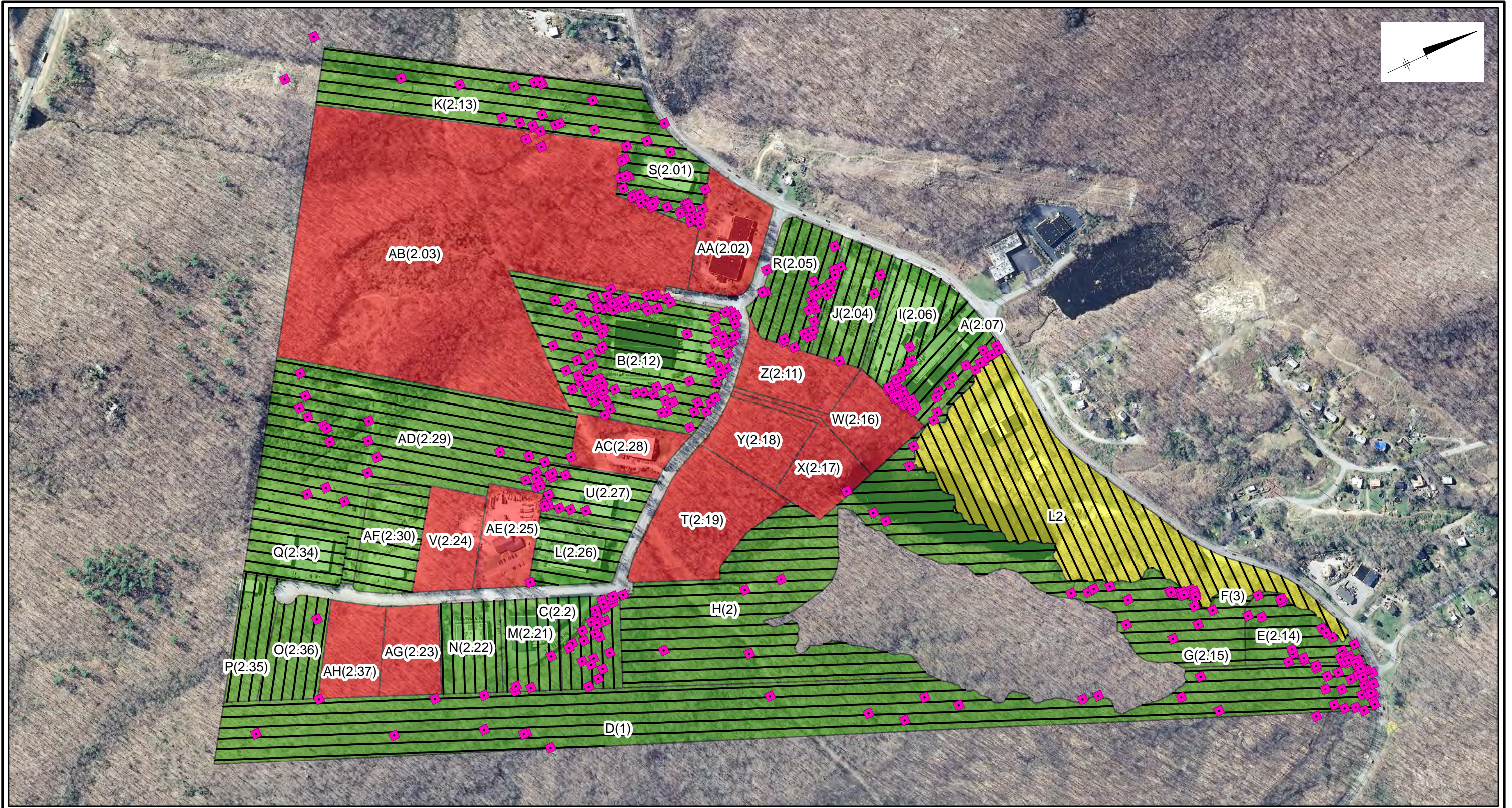
1. 2012 AERIAL IMAGE,
NEW JERSEY GEOGRAPHIC INFORMATION NETWORK
2. LOT NUMBERS ARE INCLUDED IN PARENTHESES; ALL
LOTS ARE IN BLOCK 508.

RINGWOOD MINES/LANDFILL SITE
 RINGWOOD, NEW JERSEY

**HAND AUGER
 CONFIRMATION LOCATIONS**

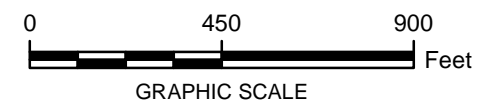


FIGURE
14



LEGEND:

- | | | | |
|--|----------------|--|---|
| | SURFACE REFUSE | | LEVEL 1 RECON SURVEY COMPLETED 12/17/14 |
| | LOT GRID LINES | | LEVEL 2 RECON SURVEY COMPLETED 5/9/14 |
| | | | NO ACCESS |



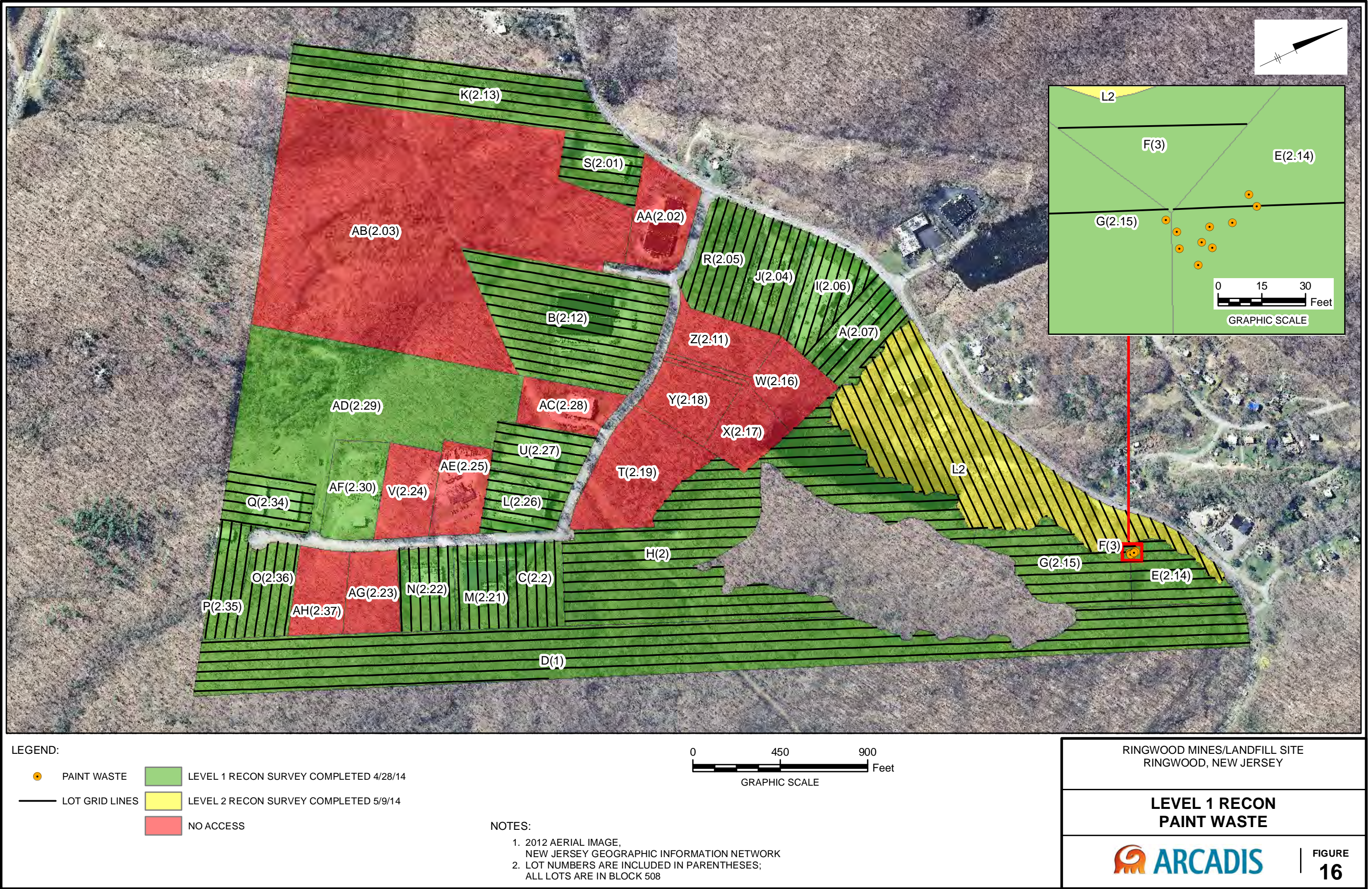
- NOTES:
1. 2012 AERIAL IMAGE,
NEW JERSEY GEOGRAPHIC INFORMATION NETWORK
 2. LOT NUMBERS ARE INCLUDED IN PARENTHESES;
ALL LOTS ARE IN BLOCK 508

RINGWOOD MINES/LANDFILL SITE
RINGWOOD, NEW JERSEY

**LEVEL 1 RECON
SURFACE REFUSE**



FIGURE
15





Appendix A

Field Reconnaissance Survey Data

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
A-1-1-1	4/2/2014 11:04:40 AM	Hummocky	Vegetation	Hummocky	4 depressions	No		
A-1-255-1	4/28/2014 10:28:42 AM	Old Building Foundation	Rocks	Top of hill	stone wall / culvert	Yes	0.5	Native Soil
A-1-256-1	4/28/2014 10:35:09 AM	Hummocky	Vegetation	Depression	can debris nearby	Yes	1.0	Native Soil
A-2-258-1	4/28/2014 9:41:23 AM	Hummocky	Hummocky	Hummocky	mound	Yes	1.0	Native Soil
A-2-259-1	4/28/2014 9:53:18 AM	Hummocky	Hummocky	Hummocky	mound	Yes	2.0	Native Soil
A-2-260-1	4/28/2014 10:07:00 AM	Hummocky	Hummocky	Hummocky	mound	Yes	2.0	Native Soil
A-3-260-1	4/28/2014 9:52:03 AM	Hummocky	Water	Hummocky	drainage pipe	No		
A-3-268-1	4/28/2014 9:32:38 AM		Vegetation	Depression		Yes	1.0	Native Soil
A-3-269-1	4/28/2014 9:48:20 AM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
A-3-270-1	4/28/2014 9:59:18 AM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
A-3-272-1	4/28/2014 10:14:41 AM		Vegetation	Depression		Yes	0.5	Native Soil
B-1-189-1	4/23/2014 9:57:42 AM	Hummocky	Hummocky	Hummocky	sheen in water	Yes	1.0	Native Soil
B-1-190-1	4/23/2014 10:21:17 AM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
B-1-191-1	4/23/2014 10:23:04 AM	Hummocky	Hummocky	Hummocky	mounds form ridge along brook, on the edge of old access road (1970s)	Yes	1.5	Native Soil
B-1-192-1	4/23/2014 10:43:01 AM	Hummocky	Hummocky	Hummocky	mound	Yes	1.0	Native Soil
B-1-193-1	4/23/2014 10:45:45 AM	Hummocky	Hummocky	Hummocky		Yes	1.0	Native Soil
B-1-194-1	4/23/2014 10:57:49 AM	Hummocky	Hummocky	Hummocky		Yes	2.0	Native Soil
B-1-195-1	4/23/2014 11:05:22 AM	Hummocky	Hummocky	Hummocky		Yes	0.5	Native Soil
B-1-196-1	4/23/2014 11:23:51 AM	Hummocky	Hummocky	Hummocky		Yes	1.0	Native Soil
B-1-197-1	4/23/2014 11:34:42 AM	Hummocky	Hummocky	Hummocky		Yes	0.5	Native Soil
B-1-198-1	4/23/2014 11:38:14 AM	Hummocky	Hummocky	Hummocky		Yes	1.0	Native Soil
B-1-199-1	4/23/2014 11:41:23 AM	Hummocky	Vegetation	Top of hill	ridge / hummocky on upper edge of bank	Yes	0.5	Native Soil
B-1-200-1	4/23/2014 11:48:16 AM	Hummocky	Hummocky	Top of hill		Yes	1.0	Native Soil
B-1-201-1	4/23/2014 11:51:53 AM	Hummocky	Water	Stream Bank		Yes	0.5	Native Soil
B-1-202-1	4/23/2014 11:53:48 AM	Hummocky	Water	Stream		No		
B-1-203-1	4/23/2014 11:57:46 AM	Fill Material	Rocks	Top of hill	rock wall boundary	No		
B-1-204-1	4/23/2014 12:03:33 PM	Fill Material	Vegetation	Flat	potential septic leachate pad / standing on edge of rock wall above brook and open lot	Yes	2.0	Native Soil
B-1-205-1	4/23/2014 2:15:29 PM	Hummocky	Water	Stream Bank	corrugated drainage pipe	Yes	1.0	Native Soil
B-1-206-1	4/23/2014 2:18:19 PM	Hummocky	Water	Stream		No		
B-1-207-1	4/23/2014 2:20:35 PM	Hummocky	Hummocky	Depression	edge of 1970s access road	Yes	0.5	Native Soil
B-1-208-1	4/23/2014 2:23:13 PM	Hummocky	Hummocky	Hummocky	mound	Yes	1.0	Native Soil
B-1-209-1	4/23/2014 2:27:10 PM	Hummocky	Hummocky	Hummocky	mound	Yes	1.5	Native Soil

Notes:

Letter listed in identifier is lot of origin

(i.e. "B-1-205-1" was collected from Lot B)

Hand augers were not advanced in some locations due to rocks/gravel, asphalt, water, debris, or thick vegetation including the presence of dense tree roots.

NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
B-1-210-1	4/23/2014 2:38:39 PM	Hummocky	Hummocky	Hummocky	mound	Yes	2.0	Native Soil
B-1-211-1	4/23/2014 2:39:47 PM	Hummocky	Hummocky	Hummocky	mound	Yes	1.5	Native Soil
B-1-212-1	4/23/2014 2:44:03 PM	Hummocky	Vegetation	Top of hill	edge of riprap	Yes	0.5	Native Soil
B-1-213-1	4/23/2014 2:47:03 PM	Fill Material	Rocks	Steep	riprap channel	No		
B-1-214-1	4/23/2014 2:49:11 PM	Fill Material	Rocks	Steep	riprap channel edge	No		
B-1-215-1	4/23/2014 3:13:13 PM	Hummocky	Hummocky	Hummocky	mound / ridges from drainage	Yes	1.5	Native Soil
B-1-216-1	4/23/2014 3:18:00 PM	Hummocky	Hummocky	Hummocky	mound	Yes	2.0	Native Soil
B-1-217-1	4/23/2014 3:21:21 PM	Hummocky	Hummocky	Hummocky	mound	Yes	1.0	Native Soil
B-1-218-1	4/23/2014 3:28:00 PM	Hummocky	Water	Stream		No		
B-1-219-1	4/23/2014 3:30:58 PM	Hummocky	Marshy	Steep	seep out of slope			
B-1-220-1	4/23/2014 3:34:20 PM	Hummocky	Water	Stream Bank	seep out of slope	Yes	0.5	Native Soil
B-1-221-1	4/24/2014 3:05:02 PM	Hummocky	Vegetation	Hummocky		Yes	1.5	Native Soil
B-1-222-1	4/23/2014 3:46:38 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
B-1-223-1	4/23/2014 3:49:54 PM	Hummocky	Vegetation	Top of hill	top of hill/edge of old access road	Yes	0.5	Native Soil
B-1-224-1	4/23/2014 3:56:47 PM	Hummocky	Rocks	Depression		Yes	0.5	Native Soil
B-1-225-1	4/23/2014 4:07:36 PM	Hummocky	Rocks	Top of hill	top of slope	Yes	1.0	Native Soil
B-1-233-1	4/24/2014 2:07:09 PM	Fill Material	Water	Stream	culvert drain	No		
B-1-234-1	4/24/2014 2:09:46 PM	Fill Material	Rocks	Flat	driveway	No		
B-1-235-1	4/24/2014 2:11:08 PM	Fill Material	Rocks	Flat	driveway entrance	No		
B-1-236-1	4/24/2014 2:14:45 PM	Fill Material	Rocks	Flat	drainage / culvert	No		
B-1-237-1	4/24/2014 2:18:10 PM	Hummocky	Vegetation	Flat	edge of tree line/ mulch	Yes	0.5	Native Soil
B-1-238-1	4/24/2014 2:24:01 PM	Fill Material	Rocks	Hummocky	mound	Yes	1.0	Fill
B-1-239-1	4/24/2014 2:53:15 PM	Hummocky	Hummocky	Hummocky	mound	Yes	0.5	Native Soil
B-1-241-1	4/24/2014 3:28:08 PM	Hummocky	Vegetation	Depression		Yes	2.0	Native Soil
B-1-242-1	4/24/2014 3:32:46 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
B-1-243-1	4/24/2014 3:54:55 PM	Hummocky	Hummocky	Top of hill	mound	Yes	0.5	Native Soil
B-1-249-1	4/25/2014 9:56:59 AM	Fill Material	Vegetation	Hummocky	construction debris / asphalt piles	No		
B-1-250-1	4/25/2014 10:03:19 AM	Hummocky	Hummocky	Hummocky	mound	Yes	1.0	Native Soil
B-1-251-1	4/25/2014 10:36:33 AM	Hummocky	Hummocky	Hummocky	mound	Yes	1.0	Native Soil
B-1-252-1	4/25/2014 10:51:25 AM	Hummocky	Hummocky	Hummocky	mound on edge of pipeline	Yes	0.5	Fill
B-2-162-1	4/23/2014 10:06:42 AM				built up road with rock wall on edge	No		
B-2-163-1	4/23/2014 10:12:43 AM				seepage well, smells like sewage	No		
B-2-164-1	4/23/2014 10:15:21 AM				atv access road	No		

Notes:

Letter listed in identifier is lot of origin

(i.e. "B-1-205-1" was collected from Lot B)

Hand augers were not advanced in some locations due to rocks/gravel, asphalt, water, debris, or thick vegetation including the presence of dense tree roots.

NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
B-2-165-1	4/23/2014 10:20:26 AM				access road	Yes	0.5	Native Soil
B-2-166-1	4/23/2014 10:30:08 AM				access road	No		
B-2-167-1	4/23/2014 10:32:01 AM	Hummocky	Vegetation	Depression	old excavation	Yes	0.5	Native Soil
B-2-168-1	4/23/2014 10:44:53 AM			Flat	access road	No		
B-2-169-1	4/23/2014 11:55:17 AM	Hummocky	Hummocky	Hummocky	mounds and depressions	Yes	1.0	Native Soil
B-2-172-1	4/23/2014 2:25:01 PM	Hummocky	Vegetation	Crevice	drainage ditch	No		
B-2-173-1	4/23/2014 2:49:47 PM	Hummocky	Vegetation	Crevice	drainage ditch	No		
B-2-174-1	4/23/2014 3:10:52 PM	Hummocky	Rocks	Flat	access road	Yes	0.5	Native Soil
B-2-175-1	4/23/2014 3:56:01 PM	Hummocky	Hummocky	Hummocky	mounds and depressions	No		
B-2-176-1	4/23/2014 4:02:03 PM	Hummocky	Hummocky	Hummocky	mound	Yes	1.5	Native Soil
B-2-177-1	4/23/2014 4:14:13 PM				access road	No		
B-2-178-1	4/23/2014 4:16:05 PM	Hummocky	Vegetation	Crevice	drainage ditch	No		
B-2-185-1	4/24/2014 2:07:40 PM	Hummocky	Vegetation	Flat	cut into native hillside for parking lot covered by fill material	NO		
B-2-186-1	4/24/2014 2:22:23 PM	Hummocky	Vegetation	Crevice	drainage ditch	Yes	1.0	Native Soil
B-2-187-1	4/24/2014 2:50:57 PM	Hummocky	Hummocky	Hummocky	mound	Yes	2.0	Native Soil
B-2-188-1	4/24/2014 2:53:22 PM	Hummocky	Hummocky	Hummocky	depression	Yes	1.0	Native Soil
B-2-189-1	4/24/2014 2:56:15 PM	Hummocky	Vegetation	Crevice	drainage ditch	Yes	1.0	Native Soil
B-2-190-1	4/24/2014 3:15:38 PM	Hummocky	Vegetation	Crevice	small drainage feature	Yes	1.0	Native Soil
B-2-249-1	4/25/2014 9:50:14 AM	Hummocky	Hummocky	Depression	depression	Yes	1.0	Native Soil
B-2-250-1	4/25/2014 9:54:33 AM	Hummocky	Vegetation	Crevice	drainage ditch	Yes	1.5	Native Soil
B-2-251-1	4/25/2014 10:22:17 AM	Hummocky	Hummocky	Crevice	drainage ditch	Yes	1.0	Native Soil
B-2-252-1	4/25/2014 10:31:13 AM	Hummocky	Vegetation	Crevice	drainage ditch	Yes	1.0	Native Soil
B-2-254-1	4/25/2014 11:06:16 AM	Hummocky	Hummocky	Hummocky	mound	Yes	1.0	Native Soil
B-2-290-1	5/8/2014 9:57:12 AM	Hummocky	Hummocky	Depression	depression	Yes	2.0	Native Soil
B-3-186-1	4/23/2014 9:54:24 AM	Hummocky	Vegetation	Hummocky	pipeline	No		
B-3-186-2	4/23/2014 10:04:04 AM	Hummocky	Hummocky	Hummocky	edge of pipeline; start of line B	Yes	0.5	Native Soil
B-3-187-1	4/23/2014 10:02:06 AM	Hummocky	Vegetation	Top of hill	small mound	Yes	0.5	Native Soil
B-3-187-2	4/23/2014 10:18:18 AM	Hummocky	Hummocky	Top of hill		Yes	0.5	Native Soil
B-3-188-1	4/23/2014 10:07:29 AM		Vegetation	Flat	small mound near tree	Yes	0.5	Native Soil
B-3-188-2	4/23/2014 10:22:55 AM	Hummocky	Water	Depression	potential drainage pipe area. remnants of seep from potential drainage pipe	Yes	0.5	Native Soil
B-3-189-1	4/23/2014 10:11:30 AM		Vegetation	Flat	small mound near a tree	Yes	0.5	Native Soil
B-3-189-2	4/23/2014 10:43:00 AM	Hummocky	Hummocky	Top of hill		Yes	1.0	Native Soil
B-3-190-1	4/23/2014 10:13:36 AM		Vegetation	Flat	small mound	Yes	1.5	Native Soil

Notes:

Letter listed in identifier is lot of origin

(i.e. "B-1-205-1" was collected from Lot B)

Hand augers were not advanced in some locations due to rocks/gravel, asphalt, water, debris, or thick vegetation including the presence of dense tree roots.

NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
B-3-190-2	4/23/2014 10:47:32 AM	Hummocky	Hummocky	Top of hill	tan-brown sand	Yes	1.0	Native Soil
B-3-191-1	4/23/2014 10:17:44 AM	Fill Material	Rocks	Flat	rock wall ~4.5 ft.	No		
B-3-191-2	4/23/2014 11:10:37 AM	Hummocky	Hummocky	Top of hill		Yes	1.0	Native Soil
B-3-192-1	4/23/2014 11:16:22 AM	Hummocky	Hummocky	Top of hill		Yes	1.0	Native Soil
B-3-192-2	4/23/2014 10:24:18 AM	Fill Material	Rocks		rock wall	No		
B-3-193-1	4/23/2014 11:27:08 AM	Hummocky	Rocks	Top of hill	rock wall leading to open grassy lot	No		
B-3-193-2	4/23/2014 10:31:29 AM		Vegetation	Top of hill	mound	Yes	0.5	Native Soil
B-3-194-1	4/23/2014 11:32:33 AM	Hummocky	Vegetation	Flat	start of open grassy lot/leach field	Yes	0.5	Native Soil
B-3-194-2	4/23/2014 10:35:29 AM	Hummocky	Vegetation	Top of hill	mound on the edge of grassy field	Yes	0.5	Native Soil
B-3-195-1	4/23/2014 10:42:39 AM		Vegetation	Flat	edge of field	Yes	0.5	Native Soil Fill
B-3-195-2	4/23/2014 11:37:03 AM	Hummocky	Vegetation	Flat	end of grassy lot/ leach field	Yes	0.5	Native Soil
B-3-196-1	4/23/2014 10:49:06 AM		Vegetation	Flat	small grassy mound in field	Yes	0.5	Native Soil
B-3-196-2	4/23/2014 11:46:46 AM	Hummocky	Hummocky	Top of hill	ridge on edge of potential access road/path	Yes	0.5	Native Soil
B-3-197-1	4/23/2014 10:52:02 AM		Vegetation	Flat	field; septic leach field according to Mike the location contact	Yes	0.5	Native Soil
B-3-197-2	4/23/2014 11:52:41 AM	Hummocky	Hummocky	Top of hill	2nd ridge past potential old access road/line	Yes	0.5	Native Soil
B-3-198-1	4/23/2014 10:54:15 AM		Vegetation	Flat	access road	Yes	0.5	Fill
B-3-198-2	4/23/2014 2:11:50 PM	Hummocky	Hummocky	Top of hill	small mound	Yes	0.5	Native Soil
B-3-199-1	4/23/2014 2:30:07 PM	Hummocky	Rocks	Hummocky	start of riprap	No		
B-3-199-2	4/23/2014 10:59:14 AM		Vegetation	Flat	access road	Yes	0.5	Fill
B-3-200-1	4/23/2014 2:35:46 PM	Hummocky	Rocks	Hummocky	end of riprap	No		
B-3-201-1	4/23/2014 11:10:09 AM		Vegetation	Top of hill	small hill on edge of access road and field	Yes	0.5	Native Soil
B-3-201-2	4/23/2014 2:54:40 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
B-3-202-1	4/23/2014 3:03:46 PM	Hummocky	Hummocky	Depression	small depression	Yes	0.5	Native Soil
B-3-202-2	4/23/2014 11:13:28 AM		Vegetation	Flat	edge of field	Yes	0.5	Native Soil
B-3-203-1	4/23/2014 11:39:08 AM		Rocks	Flat	access road; appears to lead to mound	No		
B-3-203-2	4/23/2014 3:40:49 PM	Hummocky	Hummocky	Top of hill		Yes	0.5	Native Soil
B-3-204-1	4/23/2014 3:52:25 PM	Hummocky	Hummocky	Top of hill	small mound	Yes	0.5	Native Soil
B-3-204-2	4/23/2014 11:47:32 AM		Vegetation	Depression	with adjacent mound	Yes	0.5	Fill

Notes:

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(i.e. "B-1-205-1" was collected from Lot B)

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
B-3-205-1	4/23/2014 3:58:12 PM	Hummocky	Hummocky	Depression	potential old access path/road towards street	Yes	0.5	Native Soil
B-3-205-2	4/23/2014 11:50:24 AM		Rocks	Flat	access road	No		
B-3-206-1	4/23/2014 11:54:03 AM		Rocks	Flat	border between access road and lawn	No		
B-3-206-2	4/23/2014 4:03:35 PM	Hummocky	Hummocky	Top of hill	mound with young trees	Yes	1.0	Native Soil
B-3-207-1	4/23/2014 4:07:10 PM	Hummocky	Rocks	Top of hill	end of wooded area. start of grassy area	No		
B-3-208-1	4/23/2014 4:10:34 PM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
B-3-208-2	4/23/2014 12:02:48 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
B-3-209-1	4/23/2014 2:09:46 PM		Rocks	Flat	riprap	No		
B-3-210-1	4/23/2014 2:13:25 PM		Vegetation	Depression		Yes	0.5	Native Soil
B-3-211-1	4/23/2014 2:18:51 PM		Rocks	Flat	riprap	No		
B-3-212-1	4/23/2014 2:29:38 PM	Fill Material	Rocks	Top of hill	fill from driveway	No		
B-3-213-1	4/23/2014 2:34:18 PM	Hummocky	Vegetation	Top of hill	small mound	Yes	0.5	Native Soil
B-3-214-1	4/23/2014 2:41:01 PM		Vegetation	Top of hill	small mound	Yes	0.5	Native Soil
B-3-215-1	4/23/2014 3:34:25 PM		Vegetation	Depression	dried water pathway	Yes	0.5	Native Soil
B-3-216-1	4/23/2014 4:08:50 PM		Vegetation	Top of hill	small mound	Yes	0.5	Native Soil
B-3-217-1	4/23/2014 4:12:01 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
B-3-218-1	4/23/2014 4:14:51 PM	Hummocky	Vegetation	Top of hill	small mound	Yes	0.5	Native Soil
B-3-228-1	4/24/2014 2:09:29 PM	Hummocky	Hummocky	Flat	start of asphalt driveway	No		
B-3-229-1	4/24/2014 2:11:58 PM	Hummocky	Hummocky	Flat	end of asphalt driveway	No		
B-3-230-1	4/24/2014 2:13:44 PM	Hummocky	Hummocky	Hummocky	start of wooded area	Yes	0.5	Native Soil
B-3-231-1	4/24/2014 2:22:01 PM	Hummocky	Hummocky	Top of hill	mound	Yes	0.5	Native Soil
B-3-232-1	4/24/2014 2:34:09 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
B-3-233-1	4/24/2014 3:04:36 PM	Hummocky	Hummocky	Top of hill	mound	Yes	1.0	Native Soil
B-3-234-1	4/24/2014 3:07:23 PM	Hummocky	Hummocky	Top of hill	mound	Yes	1.0	Native Soil
B-3-235-1	4/24/2014 3:17:36 PM	Hummocky	Hummocky	Depression	small depression	Yes	0.5	Native Soil
B-3-236-1	4/24/2014 3:19:38 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
B-3-237-1	4/24/2014 2:08:21 PM		Vegetation	Depression	elongate depression between lawn and woods for water flow	Yes	0.5	Native Soil
B-3-237-2	4/24/2014 3:26:07 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
B-3-238-1	4/24/2014 3:28:38 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
B-3-238-2	4/24/2014 2:13:15 PM		Vegetation	Depression	small	Yes	1.0	Native Soil
B-3-239-1	4/24/2014 2:19:06 PM		Vegetation	Depression	elongated	Yes	0.5	Native Soil
B-3-239-2	4/24/2014 3:33:15 PM	Hummocky	Hummocky	Top of hill	mound	Yes	0.5	Native Soil

Notes:

Letter listed in identifier is lot of origin

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
B-3-240-1	4/24/2014 3:36:40 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
B-3-240-2	4/24/2014 2:22:58 PM		Vegetation	Top of hill	small elongated mound	Yes	0.5	Native Soil
B-3-241-1	4/24/2014 3:39:10 PM	Hummocky	Hummocky	Top of hill	small mound	Yes	1.0	Native Soil
B-3-241-2	4/24/2014 2:27:47 PM		Vegetation	Top of hill	small mound	Yes	0.5	Native Soil
B-3-242-1	4/24/2014 2:30:27 PM		Vegetation	Depression		Yes	0.5	Native Soil
B-3-242-2	4/24/2014 3:40:42 PM	Hummocky	Hummocky	Steep	to of ridge to asphalt	Yes	1.0	Native Soil
B-3-243-1	4/24/2014 2:39:27 PM	Hummocky	Vegetation	Top of hill	small mounds	Yes	0.5	Native Soil
B-3-243-2	4/24/2014 3:45:40 PM	Hummocky	Hummocky	Steep	end of wooded area	Yes	0.5	Native Soil
B-3-244-1	4/24/2014 2:45:07 PM		Vegetation	Depression	minor	Yes	0.5	Native Soil
B-3-244-2	4/24/2014 3:48:31 PM	Hummocky	Hummocky	Flat	start of asphalt pavement	No		
B-3-245-1	4/24/2014 2:51:30 PM	Hummocky	Vegetation	Hummocky	beginning of pipeline	No		
B-3-246-1	4/24/2014 2:54:08 PM		Vegetation	Flat	access road	Yes	0.5	Native Soil Fill
B-3-247-1	4/24/2014 3:47:00 PM		Vegetation	Flat	border between woods and pipeline	Yes	0.5	Native Soil
B-3-248-1	4/24/2014 3:56:16 PM		Vegetation	Top of hill	small mound	Yes	0.5	Native Soil
B-3-249-1	4/25/2014 9:48:32 AM		Vegetation	Top of hill	small mound	Yes	1.0	Native Soil
B-3-249-2	4/25/2014 9:59:58 AM	Hummocky	Hummocky	Flat	end of asphalt pavement	No		
B-3-250-1	4/25/2014 10:03:23 AM	Hummocky	Vegetation	Top of hill	elongated mound next to drainage	Yes	1.0	Native Soil
B-3-250-2	4/25/2014 10:03:52 AM	Hummocky	Hummocky	Hummocky	start of wooded area	Yes	0.5	Native Soil
B-3-251-1	4/25/2014 10:17:04 AM	Hummocky	Hummocky	Hummocky	potential access path leading to metal debris	Yes	0.5	Native Soil
B-3-251-2	4/25/2014 10:10:32 AM		Vegetation	Stream Bank	dried drainage area	Yes	0.5	Native Soil
B-3-252-1	4/25/2014 10:22:58 AM	Hummocky	Hummocky	Hummocky	additional view towards potential old access path	Yes	0.5	Native Soil
B-3-252-2	4/25/2014 10:16:07 AM	Hummocky	Vegetation	Top of hill	small mound	Yes	0.5	Native Soil
B-3-253-1	4/25/2014 10:33:09 AM	Hummocky	Hummocky	Hummocky	view towards lot B parking lot	Yes	0.5	Native Soil
B-3-253-2	4/25/2014 10:20:30 AM	Hummocky	Vegetation	Hummocky	slightly hummocky	Yes	0.5	Native Soil
B-3-254-1	4/25/2014 10:25:50 AM	Fill Material	Rocks	Top of hill	building rock pile	No		
B-3-254-2	4/25/2014 10:39:10 AM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
B-3-255-1	4/25/2014 10:28:12 AM		Vegetation	Top of hill	continuation of mound and drainage	Yes	0.5	Native Soil Fill
B-3-255-2	4/25/2014 10:43:56 AM	Hummocky	Hummocky	Hummocky	view of potential access road towards pipeline	Yes	0.5	Native Soil
B-3-256-1	4/25/2014 11:01:11 AM		Vegetation	Stream	dried drainage area and mound	Yes	0.5	Native Soil Fill
B-3-257-1	4/25/2014 11:16:35 AM	Hummocky	Vegetation	Top of hill	small mound	Yes	0.5	Native Soil
B-3-258-1	4/25/2014 11:22:08 AM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
B-3-259-1	4/25/2014 11:25:49 AM		Vegetation	Depression		Yes	0.5	Native Soil
B-3-260-1	4/25/2014 11:28:23 AM		Vegetation	Top of hill	mound	Yes	0.5	Native Soil
B-3-261-1	4/25/2014 11:30:11 AM		Vegetation	Top of hill	mound	Yes	1.0	Native Soil
B-3-263-1	4/25/2014 11:38:37 AM		Vegetation	Top of hill	mound	Yes	0.5	Native Soil
C-1-257-1	4/28/2014 12:48:32 PM	Fill Material	Vegetation	Flat	driveway edge/ property 25 John Walsh company	No		
C-1-258-1	4/28/2014 12:50:37 PM	Fill Material	Vegetation	Flat	edge of driveway	No		
C-1-259-1	4/28/2014 1:14:43 PM	Fill Material	Vegetation	Flat	old access road	Yes	1.0	Native Soil
C-1-260-1	4/28/2014 1:32:35 PM	Hummocky	Vegetation	Hummocky	black corrugated drainage pipe, plastic bag	Yes	2.0	Native Soil
C-1-261-1	4/28/2014 1:41:08 PM	Hummocky	Vegetation	Steep	silt fence, plastic bottles	Yes	1.0	Native Soil
C-1-262-1	4/28/2014 2:02:50 PM	Hummocky	Hummocky	Depression		Yes	1.5	Native Soil
C-1-263-1	4/28/2014 2:07:49 PM	Hummocky	Hummocky	Hummocky	mound	Yes	1.0	Native Soil
C-1-264-1	4/28/2014 2:14:36 PM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
C-1-265-1	4/28/2014 2:23:08 PM	Hummocky	Hummocky	Hummocky	mound	Yes	1.0	Native Soil
C-1-266-1	4/28/2014 2:28:39 PM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
C-1-65-1	4/17/2014 10:29:03 AM	Hummocky	Hummocky	Hummocky	ridge/mound	Yes	0.5	Native Soil
C-1-68-1	4/17/2014 10:51:36 AM	Hummocky	Hummocky	Hummocky	mounds	Yes	1.0	Native Soil
C-1-69-1	4/17/2014 10:53:27 AM	Hummocky	Hummocky	Hummocky		Yes	1.0	Native Soil
C-2-262-1	4/28/2014 12:58:25 PM	Hummocky	Vegetation	Depression	marshy depression	Yes	2.0	Native Soil
C-2-263-1	4/28/2014 1:29:13 PM	Hummocky	Hummocky	Depression	depression	Yes	2.0	Native Soil
C-2-264-1	4/28/2014 2:14:44 PM	Hummocky	Hummocky	Depression	depression	Yes	1.0	Native Soil
C-3-261-1	4/28/2014 12:49:58 PM	Hummocky	Hummocky	Flat	start of asphalt	No		
C-3-262-1	4/28/2014 12:51:41 PM	Hummocky	Hummocky	Flat	end of asphalt; start of grass	No		
C-3-263-1	4/28/2014 12:55:55 PM	Hummocky	Hummocky	Hummocky	start of wooded area	Yes	0.5	Native Soil
C-3-264-1	4/28/2014 12:58:58 PM	Hummocky	Hummocky	Hummocky	potential access road from grassy area off parking lot	Yes	0.5	Native Soil
C-3-265-1	4/28/2014 1:17:26 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
C-3-266-1	4/28/2014 1:21:20 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
C-3-267-1	4/28/2014 1:24:51 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
C-3-268-1	4/28/2014 1:27:45 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
C-3-269-1	4/28/2014 1:33:15 PM	Hummocky	Water	Stream	potential stream/seep	No		
C-3-273-1	4/28/2014 1:03:53 PM	Hummocky	Vegetation	Top of hill	small mound	Yes	1.5	Native Soil
C-3-274-1	4/28/2014 1:07:11 PM		Vegetation	Flat	gentle slope/ ledge between 2 slopes; possible old access road	Yes	0.5	Native Soil
C-3-275-1	4/28/2014 1:25:20 PM	Hummocky	Vegetation	Steep	small mound	Yes	1.0	Native Soil

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
C-3-276-1	4/28/2014 1:35:58 PM	Hummocky	Vegetation	Depression	with water	Yes	1.5	Native Soil
C-3-277-1	4/28/2014 1:41:34 PM		Vegetation	Flat	small mound	Yes	1.5	Native Soil
C-3-278-1	4/28/2014 1:50:15 PM		Vegetation	Top of hill	small mound	Yes	2.0	Native Soil
C-3-279-1	4/28/2014 1:57:53 PM		Water	Stream	stream	No		
C-3-280-1	4/28/2014 2:23:36 PM		Vegetation	Flat	edge of the retaining wall	Yes	0.5	Native Soil
C-3-281-1	4/28/2014 2:33:54 PM		Vegetation	Flat	Ledge, access road	Yes	0.5	Native Soil
D-1-118-1	4/18/2014 9:54:55 AM	Hummocky	Rocks	Steep	downgrade of bedrock slope	Yes	0.5	Native Soil
D-1-119-1	4/18/2014 10:06:32 AM	Hummocky	Rocks	Depression	base of outcrop	Yes	1.5	Native Soil
D-1-120-1	4/18/2014 9:57:57 AM	Hummocky	Rocks	Top of hill	top of bedrock mound	Yes	0.5	Native Soil
D-1-121-1	4/18/2014 10:13:54 AM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-1-122-1	4/18/2014 10:33:15 AM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
D-1-123-1	4/18/2014 10:37:24 AM	Hummocky	Rocks	Depression		Yes	0.5	Native Soil
D-1-124-1	4/18/2014 10:51:26 AM	Hummocky	Rocks	Depression	soil is wet little water/seep at base of ridge closer to line A	Yes	0.5	Native Soil
D-1-125-1	4/18/2014 11:01:58 AM	Hummocky	Rocks	Depression		Yes	0.5	Native Soil
D-1-126-1	4/18/2014 11:13:07 AM	Hummocky	Vegetation	Depression	can see pipeline to east	Yes	0.5	Native Soil
D-1-127-1	4/18/2014 11:25:05 AM	Hummocky	Rocks	Steep	rock outcrop	No		
D-1-128-1	4/18/2014 11:27:04 AM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
D-1-129-1	4/18/2014 11:29:16 AM	Hummocky	Vegetation	Stream		No		
D-1-130-1	4/18/2014 11:32:11 AM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
D-1-131-1	4/18/2014 11:35:21 AM	Hummocky	Rocks	Depression		Yes	1.0	Native Soil
D-1-132-1	4/18/2014 12:20:55 PM	Fill Material	Vegetation	Top of hill	edge of pipeline	No		
D-1-133-1	4/18/2014 12:29:49 PM	Fill Material	Vegetation	Flat	edge of pipeline	No		
D-1-134-1	4/18/2014 12:33:25 PM	Fill Material	Hummocky	Flat	edge of pipeline	No		
D-1-138-1	4/18/2014 12:52:29 PM	Hummocky	Hummocky	Hummocky		Yes	1.0	Native Soil
D-1-139-1	4/18/2014 12:56:01 PM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
D-1-140-1	4/18/2014 1:43:31 PM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
D-1-141-1	4/18/2014 1:45:52 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
D-1-142-1	4/18/2014 1:50:26 PM	Hummocky	Marshy	Stream	seep leading to stream	Yes	0.5	
D-1-143-1	4/18/2014 1:52:41 PM	Hummocky	Water	Stream		No		
D-1-145-1	4/18/2014 2:02:47 PM	Hummocky	Rocks	Hummocky	Base of hill	No		
D-1-150-1	4/21/2014 11:00:08 AM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-1-151-1	4/21/2014 11:05:09 AM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-1-152-1	4/21/2014 11:10:03 AM	Hummocky	Water	Stream	skunk cabbage under downed tree	Yes	1.0	Native Soil
D-1-153-1	4/21/2014 11:17:16 AM	Hummocky	Vegetation	Hummocky		Yes	1.5	Native Soil

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
D-1-154-1	4/21/2014 11:27:36 AM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-1-155-1	4/21/2014 11:36:17 AM	Hummocky	Water	Stream		Yes	0.5	Native Soil
D-1-156-1	4/21/2014 11:59:16 AM	Hummocky	Water	Stream		Yes	0.5	Native Soil
D-1-157-1	4/21/2014 2:16:13 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
D-1-158-1	4/21/2014 2:19:24 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-1-159-1	4/21/2014 2:27:05 PM	Hummocky	Water	Stream		Yes	1.0	Native Soil
D-1-160-1	4/21/2014 3:13:00 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-1-161-1	4/21/2014 3:17:31 PM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
D-1-162-1	4/21/2014 3:24:51 PM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
D-1-163-1	4/21/2014 3:29:07 PM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
D-1-164-1	4/21/2014 3:31:46 PM	Hummocky	Vegetation	Depression		Yes	1.5	Native Soil
D-1-165-1	4/21/2014 3:37:04 PM	Hummocky	Vegetation	Flat	potential old access road?	Yes	1.0	Native Soil
D-1-174-1	4/22/2014 10:28:56 AM	Hummocky	Vegetation	Hummocky		Yes	1.0	Native Soil
D-1-175-1	4/22/2014 10:31:28 AM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
D-1-176-1	4/22/2014 10:36:07 AM	Hummocky	Vegetation	Flat	old access road ?	Yes	0.5	Native Soil
D-1-177-1	4/22/2014 10:39:08 AM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-1-178-1	4/22/2014 10:40:52 AM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
D-1-179-1	4/22/2014 10:45:39 AM	Hummocky	Vegetation	Depression	flat area - old road?	Yes	0.5	Native Soil
D-1-180-1	4/22/2014 10:50:12 AM	Hummocky	Rocks	Top of hill	slope on bedrock mound	Yes	0.5	Native Soil
D-1-181-1	4/22/2014 11:28:50 AM	Hummocky	Rocks	Depression		Yes	0.5	Native Soil
D-1-182-1	4/22/2014 11:38:02 AM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
D-1-183-1	4/22/2014 11:42:44 AM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
D-1-184-1	4/22/2014 11:45:55 AM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
D-1-185-1	4/22/2014 11:51:47 AM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-1-187-1	4/22/2014 2:55:46 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-1-188-1	4/22/2014 3:10:58 PM	Hummocky	Rocks	Hummocky	mound	Yes	0.5	Native Soil
D-1-286-1	5/8/2014 10:28:41 AM	Fill Material	Hummocky	Flat	potential old access road ?	Yes	2.0	Native Soil
D-1-288-1	5/8/2014 11:09:25 AM	Hummocky	Marshy	Stream	seep	Yes	0.5	Native Soil
D-1-289-1	5/8/2014 11:23:46 AM	Hummocky	Marshy	Stream	edge of marsh from seep node	Yes	0.5	Native Soil
D-1-290-1	5/8/2014 11:35:23 AM	Hummocky	Water	Stream		NA		
D-1-291-1	5/8/2014 2:11:21 PM	Hummocky	Water	Stream		NA		
D-1-292-1	5/8/2014 2:42:24 PM	Hummocky	Vegetation	Flat	potential old access road/near tree stand	Yes	0.5	Native Soil
D-1-293-1	5/8/2014 2:48:02 PM	Hummocky	Rocks	Mound	bedrock outcrop	No		
D-1-294-1	5/8/2014 2:52:35 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
D-1-295-1	5/8/2014 2:57:18 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
D-1-296-1	5/8/2014 3:03:10 PM	Hummocky	Hummocky	Mound		Yes	1.0	Native Soil
D-1-297-1	5/8/2014 3:06:46 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
D-1-298-1	5/8/2014 3:14:22 PM	Fill Material	Hummocky	Top of hill	old RR spur	Yes	0.5	Fill
D-1-64-1	4/17/2014 10:07:58 AM	Hummocky	Vegetation	Depression	10' off water	Yes	0.5	Native Soil
D-1-66-1	4/17/2014 10:36:41 AM	Old Building Foundation	Hummocky	Flat	old RR bed composed of slag and gravel	Yes	0.5	Fill
D-1-67-1	4/17/2014 10:44:02 AM	Hummocky	Marshy	Hummocky	base of RR bed random road refuse	Yes	1.0	Native Soil
D-1-70-1	4/17/2014 11:06:08 AM	Hummocky	Hummocky	Steep	mounds up slope	Yes	1.0	Native Soil
D-1-71-1	4/17/2014 11:12:27 AM	Hummocky	Hummocky	Steep		Yes	1.0	Native Soil
D-1-72-1	4/17/2014 11:28:04 AM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
D-1-73-1	4/17/2014 11:33:54 AM	Hummocky	Rocks	Steep	bedrock slope	Yes	1.5	Native Soil
D-1-74-1	4/17/2014 11:39:30 AM	Hummocky	Hummocky	Depression		Yes	1.5	Native Soil
D-1-75-1	4/17/2014 11:46:16 AM	Hummocky	Hummocky	Hummocky		Yes	1.0	Native Soil
D-2-100-1	4/18/2014 10:38:59 AM	Hummocky	Hummocky	Top of hill	hummocky area with mounds and bedrock	Yes	0.5	Native Soil
D-2-102-1	4/18/2014 10:47:45 AM	Hummocky	Hummocky	Top of hill	mound	Yes	0.5	Native Soil
D-2-103-1	4/18/2014 10:49:43 AM	Hummocky	Marshy	Hummocky	evidence of a water path around mound	Yes	0.5	Native Soil
D-2-104-1	4/18/2014 11:04:59 AM	Hummocky	Hummocky	Top of hill	mound	Yes	0.5	Native Soil
D-2-105-1	4/18/2014 11:10:50 AM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
D-2-106-1	4/18/2014 11:17:18 AM	Hummocky	Marshy	Stream	seep/stream like water collection amongst rocks	Yes	0.5	Native Soil
D-2-107-1	4/18/2014 11:29:22 AM	Hummocky	Hummocky	Top of hill	mound in hummocky area near stream like water path	Yes	0.5	Native Soil
D-2-108-1	4/18/2014 11:39:41 AM	Hummocky	Hummocky	Depression	depression before bedrock outcrop	Yes	0.5	Native Soil
D-2-109-1	4/18/2014 11:42:58 AM	Hummocky	Rocks	Top of hill	top of large bedrock outcrop	No		
D-2-135-1	4/18/2014 12:37:28 PM	Fill Material	Vegetation	Flat	edge of pipeline	No		
D-2-136-1	4/18/2014 12:40:20 PM	Fill Material	Vegetation	Top of hill	edge of pipeline	No		
D-2-137-1	4/18/2014 12:47:21 PM	Hummocky	Hummocky	Hummocky	mound	Yes	1.0	Native Soil
D-2-144-1	4/18/2014 1:55:26 PM	Hummocky	Water	Stream		No		
D-2-150-1	4/21/2014 11:05:54 AM	Hummocky	Hummocky	Hummocky	depressions	Yes	0.5	Native Soil
D-2-151-1	4/21/2014 11:40:00 AM	Hummocky	Hummocky	Hummocky	mound	Yes	1.0	Native Soil
D-2-152-1	4/21/2014 11:43:15 AM	Hummocky	Hummocky	Hummocky	hummocks	Yes	2.0	Native Soil
D-2-153-1	4/21/2014 11:53:31 AM	Hummocky	Vegetation	Depression		No		
D-2-154-1	4/21/2014 2:12:19 PM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
D-2-155-1	4/21/2014 2:34:59 PM	Hummocky	Hummocky	Depression	marshy land	Yes	1.0	Native Soil

Notes:

Letter listed in identifier is lot of origin

(i.e. "B-1-205-1" was collected from Lot B)

Hand augers were not advanced in some locations due to rocks/gravel, asphalt, water, debris, or thick vegetation including the presence of dense tree roots.

NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
D-2-155-2	4/21/2014 11:42:54 AM	Hummocky	Hummocky	Top of hill		Yes	0.5	Native Soil
D-2-156-1	4/21/2014 2:37:44 PM	Hummocky	Hummocky	Hummocky	undisturbed land but lots of depressions, marshes and fallen trees	No		
D-2-156-2	4/21/2014 11:46:09 AM	Hummocky	Hummocky	Top of hill		Yes	1.0	Native Soil
D-2-157-1	4/21/2014 3:05:00 PM	Hummocky	Hummocky	Hummocky		No		
D-2-158-1	4/21/2014 3:11:10 PM	Hummocky	Hummocky	Depression		No		
D-2-159-1	4/21/2014 3:15:38 PM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
D-2-160-1	4/21/2014 3:20:01 PM	Hummocky	Vegetation	Depression	depression	Yes	0.5	Native Soil
D-2-161-1	4/21/2014 3:41:19 PM	Hummocky	Vegetation	Hummocky		Yes	1.0	Native Soil
D-2-287-1	5/8/2014 9:41:10 AM	Hummocky	Hummocky	Depression		Yes	1.5	Native Soil
D-2-288-1	5/8/2014 9:43:39 AM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
D-2-289-1	5/8/2014 9:47:21 AM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
D-2-291-1	5/8/2014 10:03:13 AM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
D-2-292-1	5/8/2014 10:06:54 AM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
D-2-293-1						Yes	1.0	Native Soil
D-2-294-1	5/8/2014 10:42:15 AM	Hummocky	Hummocky	Mound		Yes	1.5	Native Soil
D-2-295-1	5/8/2014 2:10:37 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
D-2-296-1	5/8/2014 2:24:35 PM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
D-2-297-1	5/8/2014 2:32:06 PM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
D-2-298-1	5/8/2014 2:38:45 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
D-2-299-1	5/8/2014 2:47:07 PM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
D-2-300-1	5/8/2014 2:52:45 PM	Hummocky	Hummocky	Depression		Yes	1.5	Native Soil
D-2-301-1	5/8/2014 2:59:22 PM	Old Building Foundation			access road	No	0.5	
D-2-302-1	5/8/2014 3:05:46 PM	Hummocky	Hummocky	Mound		Yes	2.0	Native Soil
D-2-81-1	4/17/2014 10:15:17 AM	Old Building Foundation	Rocks	Top of hill	old railroad	No		
D-2-82-1	4/17/2014 10:38:46 AM	Hummocky	Marshy	Hummocky	hummocks from built up railroad	No		
D-2-83-1	4/17/2014 10:44:27 AM	Hummocky	Hummocky	Hummocky	2 mounds	Yes	1.0	Native Soil
D-2-84-1	4/17/2014 10:50:52 AM	Hummocky	Hummocky	Hummocky	2 mounds	Yes	1.5	Native Soil
D-2-85-1	4/17/2014 11:00:55 AM	Old Building Foundation	Vegetation	Flat	access road	No		
D-2-87-1	4/17/2014 2:41:10 PM	Hummocky	Hummocky	Depression	depression	Yes	1.0	Native Soil
D-2-88-1	4/17/2014 2:46:37 PM	Hummocky	Hummocky	Depression	depression	No		
D-2-89-1	4/17/2014 2:49:09 PM	Hummocky	Hummocky	Depression	depression	No		
D-2-90-1	4/17/2014 3:00:53 PM	Old Building Foundation	Vegetation	Top of hill	old fire pit with logs for seats surrounding. cans and bottles present. can of propane	No		
D-2-91-1	4/17/2014 3:18:30 PM	Hummocky	Vegetation	Top of hill	depression	Yes	0.5	Native Soil

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
D-2-92-1	4/17/2014 3:38:57 PM	Hummocky	Hummocky	Depression	depression	Yes	2.0	Native Soil
D-2-93-1	4/18/2014 9:58:06 AM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
D-2-95-1	4/18/2014 10:06:33 AM	Hummocky	Hummocky	Depression	depression	No		
D-2-96-1	4/18/2014 10:09:35 AM	Hummocky	Hummocky	Top of hill	mound near bedrock outcrop	Yes	0.5	Native Soil
D-2-97-1	4/18/2014 10:14:18 AM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
D-2-98-1	4/18/2014 10:27:03 AM	Hummocky	Hummocky	Top of hill	mound	Yes	1.0	Native Soil
D-2-99-1	4/18/2014 10:30:42 AM	Hummocky	Hummocky	Top of hill	mound	Yes	0.5	Native Soil
D-3-100-1	4/17/2014 3:22:26 PM		Vegetation	Depression	minor	Yes	0.5	Native Soil
D-3-100-2	4/17/2014 2:43:50 PM	Hummocky	Vegetation	Depression	depression	Yes	2.0	Native Soil
D-3-101-1	4/17/2014 3:25:50 PM		Vegetation	Depression	minor	Yes	0.5	Native Soil
D-3-101-2	4/18/2014 10:43:45 AM	Hummocky	Hummocky	Top of hill	small mound	Yes	0.5	Native Soil
D-3-101-3	4/17/2014 2:46:11 PM	Hummocky	Vegetation	Depression	depression	Yes	1.0	Native Soil
D-3-102-1	4/17/2014 2:49:09 PM	Hummocky	Vegetation	Depression	depression	Yes	1.5	Native Soil
D-3-102-2	4/17/2014 3:28:33 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-3-103-1	4/17/2014 3:30:01 PM	Hummocky	Vegetation	Hummocky	minor on slope	Yes	1.0	Native Soil
D-3-103-2	4/17/2014 2:52:04 PM	Hummocky	Vegetation	Depression	depression, water filled	Yes	1.0	Native Soil
D-3-104-1	4/17/2014 3:38:37 PM		Vegetation	Depression		Yes	0.5	Native Soil
D-3-104-2	4/17/2014 2:57:14 PM	Hummocky	Vegetation	Depression	depression	Yes	1.0	Native Soil
D-3-105-1	4/17/2014 3:02:01 PM	Hummocky	Vegetation	Hummocky	small mound	Yes	1.0	Native Soil
D-3-105-2	4/17/2014 3:39:42 PM		Vegetation	Depression		Yes	0.5	Native Soil
D-3-106-1	4/17/2014 3:14:05 PM	Hummocky	Vegetation	Steep	hummocky terrain, hillside	No		
D-3-106-2	4/17/2014 3:40:54 PM		Vegetation	Depression		Yes	0.5	Native Soil
D-3-107-1	4/17/2014 3:43:03 PM		Vegetation	Flat	small mound	Yes	0.5	Native Soil
D-3-107-2	4/17/2014 3:18:24 PM	Hummocky	Vegetation	Hummocky	small mound	Yes	1.0	Native Soil
D-3-108-1	4/17/2014 3:24:07 PM	Hummocky	Vegetation	Depression	depression	Yes	1.5	Native Soil
D-3-108-2	4/17/2014 3:44:45 PM		Vegetation	Hummocky	small mound, minor hummocks	Yes	0.5	Native Soil
D-3-109-1	4/17/2014 3:29:16 PM	Hummocky	Vegetation	Hummocky	small mound	Yes	1.5	Native Soil
D-3-110-1	4/17/2014 3:34:35 PM	Hummocky	Vegetation	Depression	depression	Yes	1.5	Native Soil
D-3-110-2	4/17/2014 3:53:20 PM		Rocks	Flat	edge of bedrock outcrop	No		
D-3-111-1	4/17/2014 3:36:32 PM	Hummocky	Vegetation	Hummocky	mound	Yes	1.0	Native Soil
D-3-111-2	4/17/2014 3:56:08 PM		Vegetation	Steep	small mound	Yes	0.5	Native Soil
D-3-112-1	4/17/2014 3:59:25 PM		Vegetation	Flat	minor depression	Yes	0.5	Native Soil
D-3-112-2	4/17/2014 3:41:19 PM	Hummocky	Vegetation	Depression	small depression	Yes	0.5	Native Soil
D-3-113-1	4/17/2014 3:45:57 PM	Hummocky	Vegetation	Depression	depression	Yes	1.0	Native Soil
D-3-113-2	4/17/2014 4:00:52 PM	Hummocky	Vegetation	Hummocky	minor hummocks; small mound	Yes	0.5	Native Soil
D-3-114-1	4/17/2014 4:06:20 PM		Vegetation	Steep	small mound	Yes	0.5	Native Soil

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
D-3-114-2	4/17/2014 3:47:06 PM	Hummocky	Vegetation	Depression	depression	Yes	1.0	Native Soil
D-3-115-1	4/17/2014 4:08:27 PM		Vegetation	Depression		Yes	0.5	Native Soil
D-3-115-2	4/17/2014 3:50:37 PM	Hummocky	Vegetation	Depression	depression	Yes	1.0	Native Soil
D-3-116-1	4/17/2014 4:10:27 PM		Vegetation	Depression		Yes	1.0	Native Soil
D-3-116-2	4/17/2014 3:52:14 PM	Hummocky	Vegetation	Hummocky	hummocky terrain	Yes	1.0	Native Soil
D-3-117-1	4/17/2014 3:59:37 PM	Hummocky	Vegetation	Hummocky	hummocky terrain	Yes	1.5	Native Soil
D-3-118-1	4/15/2014 9:49:15 AM	Hummocky	Vegetation	Depression	depression	Yes	1.5	Native Soil
D-3-118-2	4/18/2014 9:48:21 AM		Vegetation	Depression	minor depression; seems natural	Yes	1.0	Native Soil
D-3-119-1	4/18/2014 9:51:00 AM		Vegetation	Depression	minor natural depression	Yes	0.5	Native Soil
D-3-119-2	4/18/2014 9:53:57 AM	Hummocky	Vegetation	Hummocky	small mound	Yes	1.5	Native Soil
D-3-120-1	4/18/2014 9:53:19 AM		Vegetation	Depression	minor ; natural	Yes	1.0	Native Soil
D-3-120-2	4/18/2014 9:58:21 AM	Hummocky	Vegetation	Hummocky	small mound	Yes	2.0	Native Soil
D-3-121-1	4/18/2014 10:02:29 AM	Hummocky	Vegetation	Depression	depression	Yes	2.0	Native Soil
D-3-121-2	4/18/2014 9:56:14 AM	Hummocky	Vegetation	Hummocky	minor mounds and depression	Yes	0.5	Native Soil
D-3-122-1	4/18/2014 10:05:07 AM	Hummocky	Vegetation	Depression	small depression	Yes	1.0	Native Soil
D-3-122-2	4/18/2014 9:59:56 AM	Hummocky	Vegetation	Flat	small mound seems natural; younger trees possible old access road; near edge of bedrock outcrop	Yes	0.5	Native Soil
D-3-123-1	4/18/2014 10:10:12 AM	Hummocky	Vegetation	Hummocky	small mound next to small depression	Yes	2.0	Native Soil
D-3-123-2	4/18/2014 10:04:40 AM	Hummocky	Vegetation	Depression	small depression, near edge of bedrock outcrop	Yes	0.5	Native Soil
D-3-124-1	4/18/2014 10:16:14 AM	Hummocky	Vegetation	Hummocky	mound	Yes	0.5	Native Soil
D-3-124-2	4/18/2014 10:17:27 AM	Hummocky	Vegetation	Hummocky	small mound	Yes	1.0	Native Soil
D-3-124-3	4/18/2014 10:22:01 AM	Hummocky	Vegetation	Hummocky	small mound	Yes	0.5	Native Soil
D-3-125-1	4/18/2014 10:21:03 AM	Hummocky	Vegetation	Depression	small depression	Yes	1.0	Native Soil
D-3-125-2	4/18/2014 10:25:30 AM	Hummocky	Vegetation	Depression	depression where water is pooling	Yes	0.5	Native Soil
D-3-126-1	4/18/2014 10:23:20 AM	Hummocky	Vegetation	Depression	small depression	Yes	1.0	Native Soil
D-3-126-2	4/18/2014 10:33:29 AM	Hummocky	Vegetation	Hummocky	small mounds and depressions	Yes	0.5	Native Soil
D-3-127-1	4/18/2014 10:25:50 AM	Hummocky	Vegetation	Depression	small depression	Yes	1.5	Native Soil
D-3-127-2	4/18/2014 10:44:51 AM	Hummocky	Vegetation	Steep	2 mounds	Yes	0.5	Native Soil
D-3-128-1	4/18/2014 10:53:37 AM	Hummocky	Vegetation	Steep	minor pit and mounds likely due to falling trees	Yes	0.5	Native Soil
D-3-128-2	4/18/2014 10:29:06 AM	Hummocky	Vegetation	Hummocky	small mound	Yes	2.0	Native Soil
D-3-129-1	4/18/2014 11:00:16 AM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
D-3-129-2	4/18/2014 10:33:50 AM	Hummocky	Vegetation	Hummocky	small mound	Yes	1.5	Native Soil
D-3-130-1	4/18/2014 10:38:08 AM	Hummocky	Vegetation	Depression	small depression	Yes	1.0	Native Soil
D-3-131-1	4/18/2014 10:41:40 AM	Hummocky	Rocks	Hummocky	rock mound with some soil on top	Yes	0.5	Native Soil
D-3-131-2	4/18/2014 11:06:38 AM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-3-132-1	4/18/2014 10:45:31 AM	Hummocky	Vegetation	Depression	depression	No		
D-3-132-2	4/18/2014 11:12:27 AM		Vegetation	Depression		Yes	0.5	Native Soil
D-3-133-1	4/18/2014 11:26:14 AM	Hummocky	Vegetation	Depression	small; near edge of bedrock outcrop	Yes	0.5	Native Soil
D-3-133-2	4/18/2014 10:47:55 AM	Hummocky	Vegetation	Depression	small depression	Yes	1.0	Native Soil
D-3-134-1	4/18/2014 11:29:43 AM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-3-134-2	4/18/2014 10:51:46 AM	Hummocky	Vegetation	Depression	small depression	Yes	1.0	Native Soil
D-3-135-1	4/18/2014 10:54:43 AM	Hummocky	Vegetation	Depression	small depression	Yes	1.5	Native Soil
D-3-135-2	4/18/2014 11:36:14 AM		Water	Stream	near base of bedrock outcrop	No		
D-3-136-1	4/18/2014 11:41:02 AM	Hummocky	Rocks	Flat	edge of grassy field where the pipeline is	Yes	0.5	Fill
D-3-136-2	4/18/2014 10:57:45 AM	Hummocky	Rocks	Hummocky	small mound between two small depressions	Yes	2.0	Native Soil
D-3-137-1	4/18/2014 11:45:07 AM	Hummocky	Rocks	Flat	edge of grassy pipeline field	Yes	0.5	Fill
D-3-137-2	4/18/2014 11:02:45 AM	Hummocky	Vegetation	Hummocky	small mound	Yes	1.5	Native Soil
D-3-138-1	4/18/2014 12:29:04 PM	Hummocky	Vegetation	Flat	pipeline	Yes	0.5	Fill
D-3-138-2	4/18/2014 11:17:33 AM	Hummocky	Vegetation	Depression	small depression	Yes	1.5	Native Soil
D-3-139-1	4/18/2014 12:37:47 PM	Hummocky	Vegetation	Flat	elongate mound adjacent to pipeline	Yes	0.5	Native Soil
D-3-139-2	4/18/2014 11:37:01 AM	Fill Material	Hummocky	Flat	outside edge of pipeline clearance	No		
D-3-140-1	4/18/2014 12:43:05 PM	Hummocky	Vegetation	Flat	mound	Yes	0.5	Native Soil Fill
D-3-140-2	4/18/2014 11:39:21 AM	Fill Material	Hummocky	Flat	edge of pipeline clearance	No		
D-3-141-1	4/18/2014 12:46:29 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil Fill
D-3-141-2	4/18/2014 11:40:42 AM	Fill Material	Water	Stream	small stream	No		
D-3-142-1	4/18/2014 1:45:38 PM	Fill Material	Water	Stream	small stream	No		
D-3-142-2	4/18/2014 12:49:20 PM	Hummocky	Vegetation	Flat	mound	Yes	0.5	Native Soil
D-3-143-1	4/18/2014 1:48:26 PM	Hummocky	Vegetation	Depression	small depression	Yes	1.0	Native Soil
D-3-143-2	4/18/2014 1:00:48 PM	Hummocky	Vegetation	Hummocky	mound	Yes	0.5	Native Soil
D-3-144-1	4/18/2014 1:45:35 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-3-144-2	4/18/2014 1:50:47 PM	Hummocky	Vegetation	Depression	small depression	Yes	1.0	Native Soil
D-3-145-1	4/18/2014 1:47:28 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil

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Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
D-3-145-2	4/18/2014 1:53:44 PM	Hummocky	Vegetation	Depression	small depression	Yes	1.5	Native Soil
D-3-146-1	4/18/2014 1:51:10 PM		Water	Stream		No		
D-3-146-2	4/18/2014 1:56:48 PM	Hummocky	Vegetation	Depression	small depression	Yes	1.5	Native Soil
D-3-147-1	4/18/2014 2:02:47 PM	Hummocky	Vegetation	Depression	small depression	Yes	1.0	Native Soil
D-3-147-2	4/18/2014 1:54:42 PM	Hummocky	Vegetation	Depression	small depressions	Yes	1.0	Native Soil
D-3-148-1	4/18/2014 1:57:24 PM	Hummocky	Vegetation	Depression	small depression	Yes	0.5	Native Soil
D-3-149-1	4/18/2014 2:05:06 PM		Vegetation	Flat	mound; near bedrock outcrop	Yes	1.0	Native Soil
D-3-150-1	4/21/2014 11:02:24 AM	Hummocky	Vegetation	Top of hill	small hummocky hill	Yes	1.0	Native Soil
D-3-150-2	4/21/2014 11:08:54 AM	Hummocky	Hummocky	Depression	depression with down trees	Yes	1.0	Native Soil
D-3-151-1	4/21/2014 11:17:18 AM	Hummocky	Hummocky	Top of hill		No		
D-3-151-2	4/21/2014 11:05:58 AM	Hummocky	Vegetation	Depression	small	Yes	0.5	Native Soil
D-3-152-1	4/21/2014 11:26:56 AM	Hummocky	Hummocky	Top of hill	small mound	Yes	1.0	Native Soil
D-3-152-2	4/21/2014 11:07:14 AM	Hummocky	Vegetation	Top of hill	mound	Yes	0.5	Native Soil
D-3-153-1	4/21/2014 11:12:06 AM	Hummocky	Vegetation	Hummocky	hummocky slope	Yes	0.5	Native Soil
D-3-153-2	4/21/2014 11:37:11 AM	Hummocky	Hummocky	Top of hill	mound potentially caused by down tree	No		
D-3-154-1	4/21/2014 11:41:25 AM	Hummocky	Hummocky	Top of hill		Yes	1.0	Native Soil
D-3-154-2	4/21/2014 11:14:52 AM		Vegetation	Steep	elongated mound; water running around it	Yes	1.0	Native Soil
D-3-155-1	4/21/2014 11:25:04 AM	Hummocky	Vegetation	Top of hill	mound	Yes	1.5	Native Soil
D-3-157-1	4/21/2014 11:48:43 AM	Hummocky	Water	Stream		No		
D-3-157-2	4/21/2014 2:13:29 PM	Hummocky	Vegetation	Top of hill	mound with a nearby depression	Yes	0.5	Native Soil
D-3-158-1	4/21/2014 2:20:19 PM	Hummocky	Vegetation	Depression	small	Yes	0.5	Native Soil
D-3-158-2	4/21/2014 11:54:07 AM	Hummocky	Rocks	Stream	rapid flow; flowing from line D to E	No		
D-3-159-1	4/21/2014 2:23:26 PM	Hummocky	Vegetation	Top of hill	mound	Yes	0.5	Native Soil
D-3-159-2	4/21/2014 12:04:12 PM	Hummocky	Hummocky	Top of hill		Yes	0.5	Native Soil
D-3-160-1	4/21/2014 2:25:03 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-3-160-2	4/21/2014 2:19:52 PM	Hummocky	Hummocky	Depression	small depression with a young tree	Yes	0.5	Native Soil
D-3-161-1	4/21/2014 2:27:55 PM	Hummocky	Vegetation	Depression		Yes	1.5	Native Soil
D-3-161-2	4/21/2014 2:24:14 PM	Hummocky	Hummocky	Top of hill		Yes	1.0	Native Soil
D-3-162-1	4/21/2014 2:29:16 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-3-162-2	4/21/2014 2:27:49 PM	Hummocky	Hummocky	Top of hill		Yes	0.5	Native Soil
D-3-163-1	4/21/2014 2:36:47 PM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
D-3-163-2	4/21/2014 2:29:41 PM	Hummocky	Hummocky	Top of hill		Yes	0.5	Native Soil

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
D-3-164-1	4/21/2014 3:01:04 PM	Hummocky	Vegetation	Top of hill	mound	Yes	1.0	Native Soil
D-3-164-2	4/21/2014 2:43:04 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
D-3-165-1	4/21/2014 3:04:50 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-3-165-2	4/21/2014 2:57:25 PM	Hummocky	Hummocky	Top of hill		Yes	1.0	Native Soil
D-3-166-1	4/21/2014 3:06:42 PM	Hummocky	Rocks	Top of hill	series of mounds and depressions	Yes	0.5	Native Soil
D-3-167-1	4/21/2014 3:06:20 PM	Hummocky	Hummocky	Top of hill		Yes	0.5	Native Soil
D-3-167-2	4/21/2014 3:10:58 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-3-168-1	4/21/2014 3:08:07 PM	Hummocky	Rocks	Top of hill		No		
D-3-168-2	4/21/2014 3:14:41 PM	Hummocky	Vegetation	Top of hill	mounds and depressions	Yes	1.5	Native Soil
D-3-169-1	4/21/2014 3:11:25 PM	Hummocky	Hummocky	Depression		Yes	1.5	Native Soil
D-3-169-2	4/21/2014 3:19:03 PM	Hummocky	Vegetation	Top of hill	mound	Yes	0.5	Native Soil
D-3-170-1	4/21/2014 3:33:44 PM		Vegetation	Depression		Yes	0.5	Native Soil
D-3-170-2	4/21/2014 3:18:46 PM	Hummocky	Hummocky	Top of hill	small mound	Yes	0.5	Native Soil
D-3-171-1	4/21/2014 3:40:26 PM		Vegetation	Depression		Yes	0.5	Native Soil
D-3-171-2	4/21/2014 3:21:10 PM	Hummocky	Hummocky	Top of hill		Yes	0.5	Native Soil
D-3-172-1	4/21/2014 3:34:18 PM	Hummocky	Hummocky	Top of hill	two mounds	Yes	1.5	Native Soil
D-3-172-2	4/21/2014 3:43:39 PM		Vegetation	Depression		Yes	1.0	Native Soil
D-3-173-1	4/21/2014 3:44:07 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
D-3-174-1	4/22/2014 10:39:04 AM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
D-3-174-2	4/22/2014 10:27:43 AM		Vegetation	Depression		Yes	0.5	Native Soil
D-3-175-1	4/22/2014 10:32:15 AM	Hummocky	Vegetation	Depression	minor	Yes	0.5	Native Soil
D-3-175-2	4/22/2014 10:43:45 AM	Hummocky	Hummocky	Depression	2 small depressions near a mound	Yes	1.0	Native Soil
D-3-176-1	4/22/2014 10:52:27 AM	Hummocky	Rocks	Top of hill	top of bedrock mound	No		
D-3-176-2	4/22/2014 10:33:43 AM	Hummocky	Vegetation	Depression	small	Yes	0.5	Native Soil
D-3-177-1	4/22/2014 10:40:46 AM		Vegetation	Flat	flat and small trees; possible old access road	Yes	0.5	Native Soil
D-3-177-2	4/22/2014 11:38:53 AM	Hummocky	Hummocky	Depression	small depression on edge of bedrock outcrop	Yes	1.0	Native Soil
D-3-178-1	4/22/2014 10:51:51 AM		Vegetation	Top of hill	on top of bedrock at the top of the hill; core is less than 0.5 ft	Yes	0.5	Native Soil
D-3-178-2	4/22/2014 11:46:47 AM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
D-3-179-1	4/22/2014 11:49:41 AM	Hummocky	Hummocky	Top of hill	mound with young trees	Yes	0.5	Native Soil
D-3-179-2	4/22/2014 11:29:08 AM		Vegetation	Depression		Yes	0.5	Native Soil
D-3-180-1	4/22/2014 11:31:52 AM		Rocks	Steep	bedrock outcrop	No		
D-3-180-2	4/22/2014 11:55:16 AM	Hummocky	Rocks	Top of hill	top of bedrock mound	No		

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
D-3-181-1	4/22/2014 3:02:48 PM	Hummocky	Hummocky	Top of hill		Yes	0.5	Native Soil
D-3-181-2	4/22/2014 11:39:06 AM		Vegetation	Depression		Yes	0.5	Native Soil
D-3-182-1	4/22/2014 11:46:01 AM		Vegetation	Depression		Yes	1.0	Native Soil
D-3-183-1	4/22/2014 11:49:09 AM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
D-3-184-1	4/22/2014 11:52:31 AM		Vegetation	Depression		Yes	0.5	Native Soil
D-3-185-1	4/22/2014 3:02:35 PM		Vegetation	Top of hill	mound	Yes	1.0	Native Soil
D-3-282-1	5/8/2014 9:32:58 AM	Hummocky	Vegetation	Depression	small	Yes	1.0	Native Soil
D-3-283-1	5/8/2014 9:37:08 AM	Hummocky	Vegetation	Depression	small	Yes	1.0	Native Soil
D-3-284-1	5/8/2014 9:42:03 AM	Hummocky	Vegetation	Depression	small	Yes	1.0	Native Soil
D-3-285-1	5/8/2014 9:50:22 AM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-3-286-1	5/8/2014 9:34:53 AM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-3-286-2	5/8/2014 9:55:52 AM	Hummocky	Vegetation	Mound		Yes	0.5	Native Soil
D-3-287-1	5/8/2014 9:52:41 AM	Hummocky	Vegetation	Hummocky	small mound and depression	Yes	1.5	Native Soil
D-3-287-2	5/8/2014 10:01:08 AM	Hummocky	Vegetation	Mound		Yes	1.0	Native Soil
D-3-288-1	5/8/2014 10:05:33 AM	Hummocky	Vegetation	Depression	a few adjacent mounds as well	Yes	0.5	Native Soil
D-3-288-2	5/8/2014 10:04:39 AM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
D-3-289-1	5/8/2014 10:10:48 AM		Vegetation	Slope	possible old access road with younger trees	Yes	1.5	Native Soil
D-3-289-2	5/8/2014 10:15:19 AM	Hummocky	Rocks	Mound	linear rocky mound	No		
D-3-290-1	5/8/2014 10:19:51 AM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
D-3-291-1	5/8/2014 10:27:30 AM	Hummocky	Rocks	Mound	multiple large rock mounds	Yes	2.0	Native Soil
D-3-291-2	5/8/2014 10:31:05 AM	Hummocky	Vegetation	Mound	mound and depression	Yes	1.0	Native Soil
D-3-292-1	5/8/2014 10:40:48 AM	Hummocky	Vegetation	Mound		Yes	1.5	Native Soil
D-3-292-2	5/8/2014 10:41:55 AM	Hummocky	Vegetation	Depression	small depression	Yes	1.0	Native Soil
D-3-293-1	5/8/2014 11:25:39 AM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
D-3-293-2	5/8/2014 11:26:28 AM	Hummocky	Vegetation	Top of hill	small depression	Yes	1.5	Native Soil
D-3-294-1	5/8/2014 11:40:12 AM		Vegetation	Flat	edge of pipeline	No		
D-3-294-2	5/8/2014 11:29:15 AM	Hummocky	Vegetation	Depression	depression	Yes	1.0	Native Soil
D-3-295-1	5/8/2014 2:07:04 PM		Vegetation	Flat	pipeline	No		
D-3-295-2	5/8/2014 2:07:36 PM	Hummocky	Vegetation	Slope		Yes	1.5	Native Soil
D-3-296-1	5/8/2014 2:24:37 PM	Hummocky	Vegetation	Mound	3 mounds	Yes	1.0	Native Soil
D-3-296-2	5/8/2014 2:16:06 PM	Hummocky	Marshy	Mound		Yes	2.0	Native Soil
D-3-297-1	5/8/2014 2:40:56 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-3-297-2	5/8/2014 2:45:58 PM	Hummocky	Vegetation	Flat	potential access road	No		
D-3-298-1	5/8/2014 2:50:21 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-3-298-2	5/8/2014 2:45:24 PM		Vegetation	Flat	possible access road	Yes	0.5	Native Soil

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
D-3-299-1	5/8/2014 2:55:34 PM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
D-3-299-2	5/8/2014 2:56:35 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-3-300-1	5/8/2014 3:03:53 PM	Hummocky	Vegetation	Slope		Yes	1.5	Native Soil
D-3-300-2	5/8/2014 3:00:37 PM	Hummocky	Vegetation	Mound		Yes	0.5	Native Soil
D-3-301-1	5/8/2014 3:06:26 PM	Hummocky	Vegetation	Mound	small mound	Yes	1.0	Native Soil
D-3-301-2	5/8/2014 3:09:24 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-3-64-1	4/17/2014 10:11:35 AM	Fill Material	Vegetation	Flat	small 15 ft rock wall	Yes	0.5	Native Soil
D-3-66-1	4/17/2014 10:17:24 AM	Fill Material	Vegetation	Steep	large elongate mound with large rocks greater than 2 ft on the wall and an old railroad on top; fill contains slag	Yes	0.5	Fill
D-3-67-1	4/17/2014 10:34:24 AM	Hummocky	Vegetation	Hummocky	minor mound and depression	Yes	0.5	Native Soil
D-3-68-1	4/17/2014 10:38:33 AM		Vegetation	Depression	minor depression where water has pooled	Yes	0.5	Native Soil
D-3-69-1	4/17/2014 10:47:32 AM		Vegetation	Depression	2 depressions	Yes	0.5	Native Soil Fill
D-3-70-1	4/17/2014 10:53:20 AM		Vegetation	Flat	appears to be an old access road coming from railroad	Yes	0.5	Native Soil
D-3-71-1	4/17/2014 11:00:19 AM		Vegetation	Depression	elongated depression	Yes	0.5	Native Soil
D-3-72-1	4/17/2014 11:08:40 AM		Vegetation	Flat	mound with some rock fill	Yes	0.5	Native Soil Fill
D-3-73-1	4/17/2014 11:12:25 AM		Vegetation		small mound			
D-3-74-1	4/17/2014 11:16:26 AM		Vegetation	Flat	access road	Yes	0.5	Native Soil
D-3-75-1	4/17/2014 11:27:50 AM		Vegetation	Steep	small mound	Yes	0.5	Native Soil
D-3-76-1	4/17/2014 11:30:32 AM		Vegetation	Steep	small mound	Yes	1.0	Native Soil
D-3-77-1	4/17/2014 11:32:49 AM		Vegetation	Steep	small mound	Yes	1.0	Native Soil
D-3-78-1	4/17/2014 11:35:17 AM	Hummocky	Vegetation	Steep	minor mounds and depressions	Yes	0.5	Native Soil
D-3-79-1	4/17/2014 11:44:40 AM	Hummocky	Vegetation	Flat	small mound and depressions	Yes	0.5	Native Soil
D-3-80-1	4/17/2014 11:48:44 AM		Vegetation	Depression	2 depressions	Yes	0.5	Native Soil
D-3-81-1	4/17/2014 2:17:30 PM		Vegetation	Depression	small depression	Yes	0.5	Native Soil
D-3-81-2	4/17/2014 9:49:16 AM	Hummocky	Vegetation	Hummocky	mound	Yes	0.5	Native Soil
D-3-82-1	4/17/2014 2:22:06 PM		Vegetation	Flat	small 1 ft depression	Yes	0.5	Native Soil
D-3-82-2	4/17/2014 10:10:13 AM	Hummocky	Vegetation	Hummocky	mound off of rail bed	Yes	1.0	Native Soil
D-3-83-1	4/17/2014 2:25:37 PM		Rocks	Steep	large bedrock outcrop	NA		
D-3-83-2	4/17/2014 10:13:50 AM	Hummocky	Vegetation	Hummocky	mound off of rail bed	Yes	1.0	Native Soil
D-3-84-1	4/17/2014 10:18:20 AM	Hummocky	Vegetation	Depression	2 large depressions	Yes	1.5	Native Soil
D-3-84-2	4/17/2014 2:28:22 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
D-3-85-1	4/17/2014 2:32:27 PM	Hummocky	Vegetation	Flat	small mound	Yes	0.5	Native Soil
D-3-85-2	4/17/2014 10:20:36 AM	Hummocky	Vegetation	Depression	large depression	Yes	1.5	Native Soil

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Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
D-3-86-1	4/17/2014 2:35:05 PM	Hummocky	Vegetation	Depression	large depression with adjacent mound	Yes	0.5	Native Soil
D-3-86-2	4/17/2014 10:31:16 AM	Hummocky	Vegetation	Hummocky	mound	Yes	2.0	Native Soil
D-3-87-1	4/17/2014 2:40:56 PM		Vegetation	Flat	mound with tree	Yes	0.5	Native Soil
D-3-87-2	4/17/2014 10:34:49 AM	Hummocky	Vegetation	Hummocky	rock mound, tree not rooted	Yes	1.5	Native Soil
D-3-88-1	4/17/2014 10:37:20 AM	Hummocky	Vegetation	Hummocky	small mound	Yes	1.5	Native Soil
D-3-88-2	4/17/2014 2:45:18 PM		Vegetation	Hummocky	minor mounds and depressions	Yes	0.5	Native Soil
D-3-89-1	4/17/2014 10:43:55 AM	Hummocky	Vegetation	Depression	large depression	Yes	1.0	Native Soil
D-3-89-2	4/17/2014 2:48:52 PM		Vegetation	Flat	mound	Yes	0.5	Native Soil
D-3-90-1	4/17/2014 10:49:21 AM	Hummocky	Vegetation	Top of hill	small mound	Yes	2.0	Native Soil
D-3-90-2	4/17/2014 2:54:32 PM		Vegetation	Hummocky	mound and minor depressions	Yes	0.5	Native Soil
D-3-91-1	4/17/2014 10:53:31 AM	Hummocky	Vegetation	Top of hill	small mound	Yes	2.0	Native Soil
D-3-91-2	4/17/2014 3:00:52 PM	Hummocky	Vegetation	Hummocky	minor hummocks; on top of bedrock outcrop	Yes	0.5	Native Soil
D-3-92-1	4/17/2014 3:04:07 PM		Vegetation	Depression		Yes	0.5	Native Soil
D-3-92-2	4/17/2014 11:29:44 AM	Hummocky	Vegetation	Depression	small depression	Yes	1.0	Native Soil
D-3-93-1	4/17/2014 3:05:58 PM		Vegetation	Depression		Yes	0.5	Native Soil
D-3-93-2	4/17/2014 11:31:44 AM	Hummocky	Vegetation	Steep	depression and mound	Yes	1.0	Native Soil
D-3-94-1	4/17/2014 2:17:56 PM	Hummocky	Vegetation	Depression	depression	Yes	1.0	Native Soil
D-3-94-2	4/17/2014 3:09:23 PM		Vegetation	Depression		Yes	0.5	Native Soil
D-3-95-1	4/17/2014 3:11:09 PM	Hummocky	Vegetation	Hummocky	minor	Yes	0.5	Native Soil
D-3-95-2	4/17/2014 2:21:14 PM	Hummocky	Vegetation	Depression	depression	Yes	1.0	Native Soil
D-3-96-1	4/17/2014 2:28:29 PM	Hummocky	Vegetation	Top of hill	depression	Yes	1.5	Native Soil
D-3-96-2	4/17/2014 3:13:19 PM	Hummocky	Vegetation	Hummocky	minor hummocks	Yes	0.5	Native Soil
D-3-97-1	4/17/2014 2:31:06 PM	Hummocky	Vegetation	Depression	depression	Yes	2.0	Native Soil
D-3-97-2	4/17/2014 3:15:01 PM		Vegetation	Depression	large depression	Yes	0.5	Native Soil
D-3-98-1	4/17/2014 3:17:16 PM		Vegetation	Depression		Yes	0.5	Native Soil
D-3-98-2	4/17/2014 2:33:55 PM	Hummocky	Vegetation	Depression	depression	Yes	2.0	Native Soil
D-3-99-1	4/17/2014 2:38:45 PM	Hummocky	Vegetation	Hummocky	mound	Yes	1.5	Native Soil
D-3-99-2	4/17/2014 3:19:48 PM	Hummocky	Vegetation	Hummocky	minor	Yes	0.5	Native Soil
E-1-23-1	4/10/2014 10:58:40 AM	Hummocky	Hummocky	Hummocky	off edge of stream	Yes	0.5	Native Soil
E-1-24-1	4/10/2014 11:02:31 AM	Fill Material	Hummocky	Flat	old service road	Yes	1.0	Fill Debris
E-1-25-1	4/10/2014 11:14:47 AM	Hummocky	Hummocky	Depression	tires too	Yes	0.5	Native Soil
E-1-26-1	4/10/2014 11:38:23 AM	Hummocky	Hummocky	Top of hill	mound off old access road	No		
E-1-27-1	4/10/2014 2:05:59 PM	Hummocky	Hummocky	Steep	mound on slope - backside of Gagliano	Yes	1.0	Fill Native Soil
E-1-28-1	4/10/2014 2:12:26 PM	Hummocky	Hummocky	Hummocky		Yes	1.0	Fill Native Soil

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Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
E-1-29-1	4/10/2014 2:19:44 PM	Hummocky	Hummocky	Top of hill		Yes	1.5	Fill Native Soil
E-1-30-1	4/10/2014 2:38:37 PM	Hummocky	Hummocky	Hummocky		Yes	1.0	Fill
E-1-31-1	4/10/2014 4:06:36 PM	Hummocky	Hummocky	Hummocky		Yes	1.5	Fill Native Soil
E-1-76-1	4/17/2014 2:12:45 PM	Fill Material	Hummocky	Flat	top of culvert / edge of brook	No		
E-1-77-1	4/17/2014 2:14:17 PM	Hummocky	Hummocky	Flat	top of culvert / other edge of brook	No		
E-1-78-1	4/17/2014 2:16:02 PM	Fill Material	Vegetation	Flat		No		
E-1-79-1	4/17/2014 2:17:50 PM	Fill Material	Vegetation	Flat		No		
E-1-80-1	4/17/2014 2:19:09 PM	Fill Material	Vegetation	Flat		No		
E-1-81-1	4/17/2014 2:21:44 PM	Fill Material	Vegetation	Flat		No		
E-1-82-1	4/17/2014 2:23:40 PM	Fill Material	Vegetation	Flat		No		
E-1-83-1	4/17/2014 2:25:33 PM	Hummocky	Vegetation	Hummocky	mound far edge of lot	Yes	1.0	Fill Native Soil
E-1-84-1	4/17/2014 2:28:15 PM	Fill Material	Vegetation	Flat	back edge of open lot	No		
E-1-85-1	4/17/2014 2:29:54 PM	Hummocky	Hummocky	Hummocky	on mound by edge of open lot looking towards mounds near water	No		
E-1-86-1	4/17/2014 2:35:08 PM	Fill Material	Vegetation	Flat	edge of open lot closer to L2 area	No		
E-1-87-1	4/17/2014 2:36:41 PM	Fill Material	Vegetation	Flat		No		
E-1-88-1	4/17/2014 2:38:17 PM	Fill Material	Vegetation	Flat	edge of open lot	No		
E-1-89-1	4/17/2014 2:40:26 PM	Fill Material	Vegetation	Flat	back to open lot looking across culvert	No		
E-1-90-1	4/17/2014 2:42:21 PM	Fill Material	Vegetation	Flat	edge of culvert/access to gagliano lot	No		
E-1-91-1	4/17/2014 2:53:22 PM	Hummocky	Hummocky	Hummocky	mound	No		
E-1-92-1	4/17/2014 2:54:57 PM	Hummocky	Hummocky	Hummocky	mound	No		
E-1-93-1	4/17/2014 3:02:18 PM	Hummocky	Water	Stream	edge of brook looking towards mounds, flags marking PS location	No		
E-1-94-1	4/17/2014 3:15:41 PM	Hummocky	Hummocky	Hummocky	berm	No		
E-1-95-1	4/17/2014 3:17:10 PM	Hummocky	Hummocky	Hummocky	re-mark	No		
E-1-96-1	4/17/2014 3:18:12 PM	Hummocky	Hummocky	Hummocky	re mark of mound	No		
E-1-97-1	4/17/2014 3:19:15 PM	Hummocky	Hummocky	Hummocky	re-mark of mound	No		
E-1-98-1	4/17/2014 3:21:05 PM	Hummocky	Hummocky	Hummocky	re-mark of mound	No		
E-1-99-1	4/17/2014 3:24:47 PM	Hummocky	Vegetation	Flat	edge of cut into native mountain	No		
E-2-23-1	4/10/2014 1:09:43 PM	Hummocky	Hummocky	Hummocky	mounds	No		
E-3-24-1	4/11/2014 9:58:05 AM	Hummocky	Hummocky	Hummocky	mound	No		
G-1-100-1	4/17/2014 3:27:04 PM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil

Notes:

Letter listed in identifier is lot of origin

(i.e. "B-1-205-1" was collected from Lot B)

Hand augers were not advanced in some locations due to rocks/gravel, asphalt, water, debris, or thick vegetation including the presence of dense tree roots.

NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
G-1-32-1	4/11/2014 10:20:43 AM	Hummocky	Vegetation	Hummocky	mound off edge of hill	Yes	2.0	Fill
G-1-33-1	4/11/2014 2:21:33 PM	Hummocky	Hummocky	Flat		Yes	2.0	Native Soil
G-1-34-1	4/11/2014 2:26:08 PM	Hummocky	Hummocky	Hummocky		Yes	2.0	Native Soil
G-1-35-1	4/11/2014 2:40:54 PM	Hummocky	Hummocky	Hummocky		Yes	1.5	Fill Native Soil
G-1-37-1	4/14/2014 9:20:36 AM	Fill Material	Vegetation	Flat	Access road to gagliano lot	Yes	1.5	Fill
G-1-38-1	4/14/2014 9:25:34 AM	Fill Material	Vegetation	Flat	edge of access road into Gagliano lot	Yes	1.0	Fill
G-1-39-1	4/14/2014 9:27:15 AM	Fill Material	Hummocky	Depression	possible sink hole	Yes	2.0	Fill
G-1-40-1	4/14/2014 9:29:07 AM	Hummocky	Vegetation	Hummocky	mound on edge of access road	Yes	1.0	Fill
G-1-41-1	4/14/2014 9:33:38 AM	Hummocky	Vegetation	Depression	sink spot in fill	Yes	1.0	Fill
G-1-42-1	4/14/2014 9:54:52 AM	Hummocky	Hummocky	Hummocky	mound	Yes	2.0	Native Soil
G-1-43-1	4/14/2014 10:26:45 AM	Hummocky	Vegetation	Hummocky	mound maybe from trees	Yes	1.5	Native Soil
G-1-44-1	4/14/2014 10:56:07 AM	Hummocky	Vegetation	Hummocky	maybe old access road	Yes	1.5	Debris Native Soil
G-1-45-1	4/14/2014 1:55:58 PM	Hummocky	Rocks	Top of hill	bedrock outcrop	No		
G-1-46-1	4/14/2014 2:03:56 PM	Hummocky	Rocks	Top of hill	Bedrock	No		
G-1-47-1	4/14/2014 2:06:34 PM	Hummocky	Vegetation	Depression	on edge of outcrop	Yes	2.0	Native Soil
G-1-48-1	4/14/2014 2:09:58 PM	Fill Material	Rocks	Stream	edge of old access road	Yes	1.5	Fill
G-1-49-1	4/14/2014 2:14:32 PM	Fill Material	Water	Stream	edge of old access road	Yes	1.5	Fill
G-1-50-1	4/14/2014 2:19:07 PM	Fill Material	Vegetation	Flat	edge of access road	Yes	0.5	Native Soil
G-1-51-1	4/14/2014 2:31:35 PM	Fill Material	Vegetation	Flat	edge of old access road	Yes	0.5	Native Soil
G-1-51-2	4/14/2014 2:39:42 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
G-1-52-1	4/14/2014 2:42:34 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
G-1-53-1	4/14/2014 2:48:18 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
G-1-54-1	4/14/2014 2:51:53 PM	Fill Material	Vegetation	Flat	edge of old access road	Yes	1.0	Native Soil
G-1-55-1	4/14/2014 2:57:10 PM	Fill Material	Vegetation	Flat	edge of access road (old road)	Yes	1.0	Native Soil
G-1-56-1	4/14/2014 3:01:22 PM	Hummocky	Vegetation	Steep	old access road, may be old side road	Yes	1.0	Native Soil
G-1-57-1	4/14/2014 3:08:03 PM	Hummocky	Vegetation	Steep	edge of old access road / side road access	Yes	0.5	Native Soil
G-1-58-1	4/14/2014 3:10:41 PM	Fill Material	Vegetation	Steep	edge of side access road	Yes	0.5	Native Soil
G-1-59-1	4/14/2014 3:29:01 PM	Fill Material	Vegetation	Steep	edge of old access road	Yes	2.0	Native Soil
G-1-60-1	4/14/2014 3:33:15 PM	Hummocky	Vegetation	Steep	edge of old access road	Yes	2.0	Native Soil
G-1-61-1	4/14/2014 3:57:49 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
G-1-62-1	4/14/2014 4:00:29 PM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
G-1-63-1	4/14/2014 4:17:44 PM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
G-2-25-1	4/11/2014 10:03:33 AM	Hummocky	Hummocky	Hummocky		No		

Notes:

Letter listed in identifier is lot of origin

(i.e. "B-1-205-1" was collected from Lot B)

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
G-2-26-1	4/11/2014 3:13:05 PM	Hummocky	Hummocky	Depression		No		
G-2-37-1	4/14/2014 10:04:38 AM	Hummocky	Hummocky	Hummocky	mound	Yes	1.0	Native Soil
G-2-39-1	4/14/2014 10:10:44 AM	Hummocky	Hummocky	Hummocky	mound	Yes	1.0	Native Soil Fill
G-2-41-1	4/14/2014 11:15:52 AM	Fill Material	Vegetation	Hummocky	ridge fill	No		
G-2-42-1	4/14/2014 11:32:09 AM	Hummocky	Rocks	Hummocky	fill ridge	No		
G-2-43-1	4/14/2014 1:59:58 PM	Old Building Foundation	Vegetation	Flat	old road	No		
G-2-45-1	4/14/2014 2:18:46 PM	Hummocky	Hummocky	Top of hill	2 depressions	Yes	1.0	Native Soil
H-1-16-1	4/9/2014 9:50:59 AM	Hummocky	Hummocky	Hummocky	mound before clearing; one rock with coating	Yes	2.0	Native Soil
H-1-17-1	4/9/2014 10:00:09 AM	Hummocky	Hummocky	Hummocky	mound at edge of pipeline	Yes	1.5	Native Soil
H-1-18-1	4/9/2014 10:38:01 AM	Hummocky	Rocks	Depression		Yes	1.5	Native Soil
H-1-19-1	4/9/2014 12:05:47 PM	Hummocky	Hummocky	Depression	mound around possible shaft/depression/possible headstone in roots of tree - team discusses numerous shafts under paths	Yes	1.0	Native Soil
H-1-20-1	4/9/2014 12:25:23 PM	Hummocky	Hummocky	Depression	near pond	Yes	1.0	Native Soil
H-1-21-1	4/9/2014 12:59:01 PM	Hummocky	Vegetation	Depression		Yes	1.0	Native Soil
H-1-22-1	4/9/2014 1:04:05 PM	Hummocky	Vegetation	Hummocky	mound - small	Yes	0.5	Native Soil
H-2-10-1	4/9/2014 12:52:45 PM	Hummocky	Hummocky	Depression	hole	No		
H-2-11-1	4/9/2014 1:01:15 PM	Hummocky	Vegetation	Hummocky	hole	No		
H-2-12-1	4/9/2014 1:19:54 PM	Fill Material	Vegetation	Crevice	shooting range	No		
H-2-13-1	4/9/2014 3:04:56 PM	Old Building Foundation	Vegetation	Top of hill	O start line	No		
H-2-14-1	4/9/2014 3:05:54 PM	Fill Material	Rocks	Flat	P start line	No		
H-2-15-1	4/9/2014 3:09:47 PM	Fill Material	Marshy	Hummocky	Q start line	No		
H-2-16-1	4/9/2014 3:17:46 PM	Hummocky	Hummocky	Hummocky	hole	No		
H-2-17-1	4/9/2014 3:32:40 PM				O end line	No		
H-2-5-1	4/8/2014 1:03:47 PM	Hummocky	Hummocky	Depression	hole	No		
H-2-6-1	4/8/2014 1:26:18 PM	Hummocky	Hummocky	Hummocky	2 depressions	No		
H-2-7-1	4/9/2014 10:27:27 AM	Hummocky	Hummocky	Top of hill	hole	No		
H-2-8-1	4/9/2014 10:52:46 AM	Hummocky	Hummocky	Hummocky	hole	No		
H-2-9-1	4/9/2014 12:05:21 PM	Hummocky	Hummocky	Hummocky	hole	No		
H-3-282-1	5/6/2014 9:31:47 AM		Water	Stream	edge of stream	Yes	0.5	Native Soil
H-3-283-1	5/6/2014 9:37:27 AM		Water	Stream	bank of stream	Yes	2.0	Native Soil
H-3-284-1	5/6/2014 9:44:25 AM	Hummocky	Vegetation	Mound		Yes	1.0	Native Soil
H-3-285-1	5/6/2014 10:22:38 AM		Water	Stream	stream bank	Yes	1.0	Native Soil

Notes:

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
I-1-36-1	4/11/2014 3:39:39 PM	Fill Material	Water	Stream	edge of stream railroad ties and rusted propane tank	Yes	0.5	Fill
J-2-4-1	4/8/2014 10:57:14 AM	Hummocky	Hummocky	Depression	dug out	No		
K-1-37-1	4/15/2014 10:10:02 AM	Hummocky	Hummocky	Flat	apparent earth moving for utility clearance	No		
K-1-38-1	4/15/2014 10:41:38 AM	Hummocky	Vegetation	Top of hill	large depressions	No		
K-1-39-1	4/15/2014 10:59:18 AM	Hummocky	Vegetation	Top of hill	depression	No		
K-1-40-1	4/15/2014 11:04:31 AM	Hummocky	Vegetation	Steep	depression	No		
K-1-41-1	4/15/2014 11:13:16 AM	Hummocky	Vegetation	Steep	depression	No		
K-1-42-1	4/16/2014 9:57:05 AM	Hummocky	Vegetation	Depression	two small depressions	No		
K-1-43-1	4/16/2014 9:58:18 AM	Hummocky	Vegetation	Depression	large depression	No		
K-1-44-1	4/16/2014 10:06:18 AM	Hummocky	Vegetation	Depression	depression	No		
K-1-45-1	4/16/2014 10:08:02 AM	Hummocky	Vegetation	Depression	depression	No		
K-1-46-1	4/16/2014 10:14:22 AM	Hummocky	Vegetation	Top of hill	depression	No		
K-1-47-1	4/16/2014 10:21:01 AM	Hummocky	Vegetation	Depression	small depression	No		
K-1-48-1	4/16/2014 10:28:01 AM					Yes	2.0	
K-1-49-1	4/16/2014 10:33:33 AM	Hummocky	Vegetation	Depression	depression	No		
K-1-50-1	4/16/2014 10:38:18 AM	Hummocky	Vegetation	Depression	depression	No		
K-1-51-1	4/16/2014 10:41:53 AM	Hummocky	Vegetation	Top of hill	depression	No		
K-1-52-1	4/16/2014 10:44:41 AM	Hummocky	Vegetation	Depression	depression	No		
K-1-53-1	4/16/2014 10:52:23 AM	Hummocky	Vegetation	Top of hill	large depression	No		
K-1-54-1	4/16/2014 11:00:54 AM	Hummocky	Vegetation	Top of hill	small depressions	No		
K-1-55-1	4/16/2014 11:07:22 AM	Hummocky	Vegetation	Top of hill	depression	No		
K-2-46-1	4/15/2014 9:51:44 AM	Hummocky	Marshy	Depression	small pond	No		
K-2-47-1	4/15/2014 10:04:41 AM	Hummocky	Vegetation	Stream	looking at power line marsh	NA		
K-2-48-1	4/15/2014 10:56:05 AM	Hummocky	Vegetation	Hummocky	depression	No		
K-2-49-1	4/15/2014 11:09:41 AM	Hummocky	Hummocky	Hummocky	depression	No		
K-2-64-1	4/16/2014 9:46:15 AM	Hummocky	Marshy	Stream	stream	No		
K-2-65-1	4/16/2014 9:55:51 AM	Hummocky	Hummocky	Steep	depression	No		
K-2-66-1	4/16/2014 10:02:21 AM	Hummocky	Hummocky	Depression	hole making hollow noises	No		
K-2-67-1	4/16/2014 10:10:32 AM	Hummocky	Vegetation	Flat	depression and flat ground	Yes	1.5	Fill
K-2-68-1	4/16/2014 10:22:20 AM	Hummocky	Hummocky	Hummocky	depression	Yes	2.0	Fill
K-2-70-1	4/16/2014 10:37:23 AM	Hummocky	Hummocky	Depression		Yes	0.5	Fill
K-2-71-1	4/16/2014 10:42:56 AM	Hummocky	Hummocky	Depression	depression	Yes	1.0	Fill
K-2-72-1	4/16/2014 10:45:11 AM	Hummocky	Rocks	Top of hill	depression	Yes	1.0	Fill
M-2-2-1	4/7/2014 1:08:52 PM	Hummocky	Hummocky	Hummocky	4 depressions	No		

Notes:

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
O-1-10-1	4/8/2014 11:31:29 AM	Hummocky	Marshy	Depression	hole with water	Yes	0.5	Native Soil
O-1-11-1	4/8/2014 11:45:03 AM	Hummocky	Vegetation	Hummocky		Yes	0.5	Native Soil
O-1-12-1	4/8/2014 1:15:55 PM	Hummocky	Vegetation	Hummocky		No		
O-1-13-1	4/8/2014 1:41:28 PM	Hummocky	Vegetation	Hummocky	mound in front of depression - near stream	Yes	2.0	Native Soil
O-1-14-1	4/8/2014 1:48:59 PM	Hummocky	Hummocky	Depression		No		
O-1-15-1	4/8/2014 2:49:20 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
O-1-4-1	4/8/2014 9:47:46 AM	Hummocky	Vegetation	Hummocky	mound	Yes	1.5	Native Soil
O-1-5-1	4/8/2014 10:02:31 AM	Hummocky	Vegetation	Hummocky	mound	No		
O-1-6-1	4/8/2014 10:28:40 AM	Hummocky	Vegetation	Hummocky		Yes	1.5	Native Soil
O-1-7-1	4/8/2014 10:40:46 AM	Hummocky	Hummocky	Hummocky		No		
O-1-8-1	4/8/2014 11:14:17 AM	Hummocky	Rocks	Depression		Yes	1.5	Native Soil
O-1-9-1	4/8/2014 11:29:40 AM	Hummocky	Marshy	Depression		No		
P-2-3-1	4/7/2014 2:44:05 PM	Hummocky	Marshy	Depression	depression	No		
R-1-56-1	4/16/2014 2:30:58 PM	Hummocky	Vegetation	Depression	large depression	No		
R-1-57-1	4/16/2014 2:39:11 PM	Hummocky	Vegetation	Depression	depressions and garbage	No		
R-1-58-1	4/16/2014 2:41:48 PM	Hummocky	Vegetation	Flat	depression	No		
R-1-59-1	4/16/2014 2:45:30 PM	Hummocky	Vegetation	Flat	access road lot z	No		
R-1-60-1	4/16/2014 2:48:38 PM	Hummocky	Vegetation	Flat	small access road	No		
R-1-61-1	4/16/2014 2:59:51 PM	Hummocky	Vegetation	Depression	straw and depressions, dead vegetation	No		
R-1-62-1	4/16/2014 3:59:24 PM	Hummocky	Marshy	Flat	two depressions	No		
R-2-74-1	4/16/2014 2:27:34 PM	Fill Material	Vegetation	Flat	ACCESS ROAD	No		
R-2-75-1	4/16/2014 2:29:16 PM	Hummocky	Hummocky	Depression	depression\	No		
R-2-78-1	4/16/2014 2:39:21 PM	Hummocky	Hummocky	Depression	depression filled with water	Yes	1.0	Fill Native Soil
R-2-79-1	4/16/2014 3:16:50 PM	Hummocky	Marshy	Flat	native marshland almost impassable	No		
R-2-80-1	4/16/2014 3:34:54 PM	Hummocky	Hummocky	Hummocky	mounds	No		
S-1-226-1	4/24/2014 11:04:02 AM	Hummocky	Hummocky	Hummocky	mound	Yes	1.0	Native Soil
S-1-227-1	4/24/2014 11:07:42 AM	Hummocky	Hummocky	Hummocky	mound	Yes	1.0	Native Soil
S-1-228-1	4/24/2014 11:13:57 AM	Hummocky	Hummocky	Hummocky	mound	Yes	1.0	Native Soil
S-1-229-1	4/24/2014 11:11:48 AM	Hummocky	Hummocky	Hummocky	mound	Yes	1.0	Native Soil
S-1-230-1	4/24/2014 11:20:00 AM	Hummocky	Hummocky	Hummocky	mound	Yes	0.5	Native Soil
S-1-231-1	4/24/2014 11:21:29 AM	Hummocky	Hummocky	Hummocky	mound	Yes	1.0	Native Soil
S-1-232-1	4/24/2014 11:24:48 AM	Hummocky	Hummocky	Hummocky	mounds near edge of property asphalt edge	Yes	1.5	Fill
S-2-179-1	4/24/2014 9:36:50 AM	Fill Material	Rocks	Flat	boulder wall	No		

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
S-2-180-1	4/24/2014 9:49:11 AM	Old Building Foundation	Water	Stream	drainage outfall	No		
S-2-181-1	4/24/2014 10:08:00 AM	Hummocky	Vegetation	Hummocky	large mound	Yes	0.5	Native Soil
S-2-183-1	4/24/2014 10:32:59 AM	Fill Material	Vegetation	Flat	crushed stone pile	Yes	0.5	Debris
S-2-184-1	4/24/2014 11:02:15 AM	Hummocky	Hummocky	Hummocky	drainage pathway from parking lot	Yes	1.0	Native Soil
S-3-226-1	4/24/2014 9:50:50 AM	Hummocky	Vegetation	Depression	small	Yes	0.5	Native Soil
S-3-226-2	4/24/2014 11:31:53 AM	Hummocky	Hummocky	Flat	start of asphalt driveway	No		
S-3-227-1	4/24/2014 11:42:05 AM	Hummocky	Hummocky	Flat	end of asphalt	No		
S-3-227-2	4/24/2014 9:55:26 AM	Hummocky	Vegetation	Depression	minor	Yes	0.5	Native Soil
S-3-228-1	4/24/2014 10:04:21 AM	Hummocky	Vegetation	Top of hill	small mound	Yes	0.5	Native Soil
S-3-229-1	4/24/2014 10:17:37 AM		Vegetation	Depression	water accumulation	Yes	0.5	Native Soil
S-3-230-1	4/24/2014 10:23:12 AM		Water	Stream		No		
S-3-231-1	4/24/2014 10:26:16 AM		Water	Stream	drainage from building	No		
S-3-232-1	4/24/2014 10:29:52 AM		Vegetation	Depression	drainage from building	Yes	0.5	Native Soil
S-3-233-1	4/24/2014 10:36:40 AM		Marshy	Flat	slightly wet and marshy area	Yes	0.5	Native Soil
S-3-234-1	4/24/2014 10:42:15 AM	Hummocky	Vegetation	Top of hill	small mound	Yes	0.5	Native Soil
S-3-235-1	4/24/2014 10:59:48 AM		Vegetation	Top of hill	small mound	Yes	0.5	Native Soil
S-3-236-1	4/24/2014 11:24:54 AM	Hummocky		Top of hill	small mound in lawn	No		
U-1-253-1	4/25/2014 2:24:04 PM	Fill Material	Hummocky	Flat	edge of leachate septic field	Yes	1.0	Fill
U-2-255-1	4/25/2014 2:00:41 PM	Hummocky	Hummocky	Flat	mound	Yes	1.5	Native Soil
U-2-256-1	4/25/2014 2:10:23 PM	Hummocky	Hummocky	Steep	escarpment for building pad. soil cut out	No		
U-2-257-1	4/25/2014 2:49:54 PM	Hummocky	Hummocky	Crevice	drainage ditch	Yes	1.0	Native Soil
U-3-256-1	4/25/2014 2:12:29 PM	Hummocky	Hummocky	Top of hill	mound	Yes	0.5	Native Soil
U-3-257-1	4/25/2014 2:25:26 PM	Hummocky	Hummocky	Top of hill	mound	Yes	1.0	Native Soil
U-3-258-1	4/25/2014 2:29:47 PM	Hummocky	Hummocky	Flat	start of leach field	No		
U-3-259-1	4/25/2014 2:34:20 PM	Hummocky	Hummocky	Flat	start of asphalt pavement	No		
U-3-264-1	4/25/2014 2:02:32 PM		Vegetation	Top of hill	water drainage with mounded edges	Yes	0.5	Native Soil
U-3-265-1	4/25/2014 2:10:57 PM		Vegetation	Top of hill	small mound	Yes	0.5	Native Soil
U-3-266-1	4/25/2014 2:14:50 PM		Vegetation	Top of hill	small mound	Yes	0.5	Native Soil Fill
U-3-267-1	4/25/2014 2:25:37 PM		Vegetation	Flat	border between forest and leach field	Yes	0.5	Native Soil
AD-1-1	12/9/2014 2:35:49 PM	Hummocky	Water	Stream	drainage from building/soapy	Yes	0.5	Native Soil
AD-1-3	12/9/2014 3:06:31 PM	Old Building Foundation	Marshy	Flat	sewer/manhole	No		
AD-1-4	12/9/2014 3:17:05 PM	Fill Material	Marshy	Flat	sweet odor	Yes	0.5	Native Soil Fill
AD-1-5	12/9/2014 3:27:47 PM	Fill Material	Marshy	Flat	old access road	Yes	1.0	Fill

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
AD-1-6	12/9/2014 3:46:33 PM	Hummocky	Hummocky	Mound	boulder and soil pile	Yes	2.0	Fill
AD-1-10	12/10/2014 9:59:46 AM	Hummocky	Hummocky	Hummocky	tree stumps / discard area	No		
AD-1-11	12/10/2014 10:06:42 AM	Hummocky	Hummocky	Mound	old fill pile with boulders - soil mound overgrown by thorns	Yes	2.0	Fill
AD-1-12	12/10/2014 10:13:15 AM	Hummocky	Hummocky	Hummocky	edge of mound	Yes	1.0	Fill
AD-1-13	12/10/2014 10:16:04 AM	Hummocky	Water	Bottom of slope	stream	No		
AD-1-14	12/10/2014 10:19:16 AM	Hummocky	Water	Bottom of slope	stream	No		
AD-1-15	12/10/2014 10:23:55 AM	Hummocky	Hummocky	Stream	stream bank	Yes	0.5	Native Soil
AD-1-16	12/10/2014 10:26:53 AM	Fill Material	Hummocky	Hummocky	potential historic fill pile	Yes	0.5	Fill
AD-1-17	12/10/2014 10:36:12 AM	Fill Material	Vegetation	Flat	access rd	Yes	0.5	Fill
AD-1-18	12/10/2014 10:42:48 AM	Hummocky	Hummocky	Hummocky	fill pile	Yes	1.0	Fill
AD-1-19	12/10/2014 10:47:00 AM	Fill Material	Hummocky	Top of hill	old access road	Yes	0.5	Fill Native Soil
AD-1-20	12/10/2014 10:55:41 AM	Hummocky	Hummocky	Hummocky	tree stumps and mounded areas	Yes	0.5	Fill
AD-1-7	12/10/2014 9:23:02 AM	Fill Material	Vegetation	Bottom of slope	old access rd	No		
AD-1-8	12/10/2014 9:43:54 AM	Hummocky	Hummocky	Hummocky	tree stumps	No		
AD-1-9	12/10/2014 9:56:17 AM	Fill Material	Vegetation	Flat	old access road	Yes	0.5	Fill
AD-1-21	12/15/2014 9:26:54 AM	Hummocky	Hummocky	Mound	soil mound - mark on lower slope / not standing directly on top	Yes	1.0	Native Soil
AD-1-22	12/15/2014 9:33:25 AM	Hummocky	Hummocky	Mound	mounds / disturbed area - mounds	Yes	1.5	Fill Native Soil
AD-1-23	12/15/2014 9:40:12 AM	Hummocky	Hummocky	Hummocky	mounds on edge of stream	Yes	1.5	Native Soil Fill
AD-1-24	12/15/2014 9:44:37 AM	Hummocky	Hummocky	Mound	mounds/ridge on edge of water	Yes	1.0	Native Soil Fill
AD-1-25	12/15/2014 9:47:29 AM	Hummocky	Hummocky	Mound	soil mound	Yes	1.5	Native Soil Fill
AD-1-26	12/15/2014 9:52:32 AM	Hummocky	Hummocky	Mound	mounds/ridge edge of stream	Yes	1.5	Native Soil
AD-1-27	12/15/2014 9:57:32 AM	Hummocky	Hummocky	Hummocky	mound ridge	Yes	1.0	Native Soil Fill
AD-1-28	12/15/2014 10:03:08 AM	Old Building Foundation	Asphalt	Flat	sewer grate	No		
AD-1-29	12/15/2014 10:20:34 AM	Hummocky	Hummocky	Hummocky	mounds on edge of water	Yes	1.5	Native Soil Fill
AD-1-30	12/15/2014 10:29:09 AM	Old Building Foundation	Hummocky	Hummocky	open sewer grate	No		
AD-1-31	12/15/2014 10:31:20 AM	Old Building Foundation	Hummocky	Hummocky	sewer grate/ closed on top unlike other/edge of stream /pool	No		
AD-1-32	12/15/2014 10:50:25 AM	Hummocky	Hummocky	Hummocky	boulder and soil mound on edge of access roads	Yes	0.5	Native Soil Fill
AD-1-33	12/15/2014 11:01:26 AM	Hummocky	Hummocky	Mound	mound off edge of access road off property limit	Yes	1.0	Native Soil Fill
AD-1-34	12/15/2014 11:05:13 AM	Hummocky	Hummocky	Mound	mounds on edge of clearing	Yes	1.0	Native Soil Fill

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
AD-1-35	12/15/2014 11:08:13 AM	Old Building Foundation	Asphalt	Flat	fire ring with a lot of nails and metal debris	No		
AD-1-36	12/15/2014 11:12:14 AM	Hummocky	Hummocky	Slope	edge of clearing / cut into potential native grade	Yes	1.0	Native Soil
AD-1-37	12/15/2014 11:17:27 AM	Hummocky	Hummocky	Mound	wood debris	Yes	1.0	Native Soil Fill
AD-1-38	12/15/2014 11:20:18 AM	Old Building Foundation	Hummocky	Flat	access road	No		
AD-1-39	12/15/2014 11:24:07 AM	Hummocky	Hummocky	Mound	mounds possibly due to clearing	Yes	0.5	Native Soil
AD-1-40	12/15/2014 11:29:20 AM	Hummocky	Hummocky	Mound	mounds in disturbed ground	Yes	0.5	Native Soil Fill
AD-1-41	12/15/2014 11:40:17 AM	Hummocky	Hummocky	Mound	large mound	Yes	1.0	Native Soil Fill
AD-1-42	12/15/2014 11:46:47 AM	Hummocky	Water	Stream	edge of stream	Yes	1.0	Native Soil
AD-1-43	12/15/2014 11:50:52 AM	Hummocky	Hummocky	Mound	mound ridge of soils and boulders	Yes	1.0	Native Soil Fill
AD-1-44	12/15/2014 11:56:33 AM	Hummocky	Hummocky	Mound	soil and boulder mound	Yes	1.0	Native Soil Fill
AD-1-45	12/15/2014 1:24:01 PM	Hummocky	Hummocky	Hummocky	mounds off edge of clearing	No		
AD-1-46	12/15/2014 1:29:53 PM	Hummocky	Hummocky	Mound	standing on mound picture of adjacent mound	Yes	0.5	Fill Native Soil
AD-1-47	12/15/2014 1:40:52 PM	Hummocky	Hummocky	Mound	mounds	No		
AD-1-48	12/15/2014 1:45:05 PM	Hummocky	Hummocky	Mound	mound on edge of potential access roads	Yes	1.0	Native Soil Fill
AD-1-49	12/15/2014 1:52:54 PM	Hummocky	Hummocky	Hummocky	roofing tile pile off property	No		
AD-1-50	12/15/2014 1:56:36 PM	Hummocky	Hummocky	Hummocky		Yes	1.0	Fill Native Soil
AD-1-51	12/15/2014 2:15:13 PM	Hummocky	Hummocky	Mound	mound near ridge of (?) potentially original grade	Yes	0.5	Native Soil Fill
AD-1-52	12/15/2014 2:31:55 PM	Hummocky	Hummocky	Top of hill	top of ridge - potential original grade	Yes	1.0	Native Soil
AD-1-53	12/15/2014 2:40:06 PM	Hummocky	Hummocky	Mound	upper ridge / mound	Yes	1.0	Native Soil Fill
AD-1-54	12/15/2014 2:44:31 PM	Old Building Foundation	Vegetation	Flat	access road	No		
AD-1-55	12/15/2014 2:50:20 PM	Hummocky	Hummocky	Bottom of slope	edge of mounds and access rd	Yes	1.0	Native Soil Fill
AD-1-56	12/15/2014 2:52:46 PM	Hummocky	Hummocky	Slope	base of mound	Yes	0.5	Native Soil Fill
AD-1-57	12/15/2014 2:56:26 PM	Hummocky	Hummocky	Mound	multiple mounds - large in size	Yes	1.0	Native Soil Fill
AD-1-59	12/15/2014 3:11:31 PM	Hummocky	Hummocky	Top of hill	top of ridge near water/ head	Yes	1.0	Native Soil Fill
AG-1-58	12/15/2014 3:06:12 PM	Hummocky	Hummocky	Hummocky	tree stumps	Yes	1.0	Native Soil Fill
AD-1-60	12/16/2014 9:03:12 AM	Hummocky	Vegetation	Flat	access road near sewer grate/ near potential cut of original grade	No		
AD-1-61	12/16/2014 9:08:04 AM	Hummocky	Hummocky	Depression	near sewer	Yes	0.5	Native Soil
AD-1-62	12/16/2014 9:11:05 AM	Hummocky	Hummocky	Top of hill	ridge edge	Yes	0.5	Native Soil

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NA - Not applicable

Appendix A - Table 1. Disturbed Ground Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Date Collected	Object Type	Land Type	Ground Surface Type	General Observations	Hand Auger Completed?	Depth (feet)	Observations
AD-1-63	12/16/2014 9:13:07 AM	Hummocky	Hummocky	Top of hill	mounds/ridge of mounds	Yes	1.0	Native Soil/Fill
AD-1-64	12/16/2014 9:19:35 AM	Hummocky	Hummocky	Depression	near pipe/sewer concrete	Yes	1.0	Native Soil
AD-1-65	12/16/2014 9:32:23 AM	Hummocky	Rocks	Mound		Yes	1.0	Native Soil
AD-1-66	12/16/2014 9:35:15 AM	Fill Material	Vegetation	Flat	potential old access roads	Yes	0.5	Native Soil
AD-1-67	12/16/2014 10:18:50 AM	Hummocky	Hummocky	Mound	mound of dark soils	Yes	1.0	Fill
AD-1-68	12/16/2014 10:23:38 AM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
AD-1-69	12/16/2014 10:25:23 AM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
AD-1-70	12/16/2014 10:28:05 AM	Fill Material	Vegetation	Flat	potential access road	No		
AD-1-71	12/16/2014 10:37:13 AM	Hummocky	Vegetation	Depression		Yes	0.5	Native Soil
AD-1-72	12/16/2014 10:39:56 AM	Hummocky	Hummocky	Flat	potential old access road	Yes	0.5	Native Soil
AD-1-73	12/16/2014 10:42:07 AM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
AD-1-74	12/16/2014 10:48:31 AM	Hummocky	Hummocky	Depression		Yes	1.0	Native Soil
AD-1-75	12/16/2014 11:11:07 AM	Hummocky	Hummocky	Mound	soil ridge	Yes	1.5	Native Soil/Fill
AD-1-76	12/16/2014 11:14:01 AM	Hummocky	Hummocky	Depression		Yes	1.5	Native Soil
AD-1-77	12/16/2014 11:20:43 AM	Hummocky	Hummocky	Depression		Yes	1.5	Native Soil
AD-1-78	12/16/2014 11:57:55 AM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
AD-1-79	12/16/2014 12:00:44 PM	Hummocky	Hummocky	Depression	3 pits/cuts in soil	Yes	0.5	Native Soil
AD-1-80	12/16/2014 12:08:30 PM	Hummocky	Hummocky	Depression	potentially near access road	Yes	1.0	Native Soil
AD-1-81	12/16/2014 12:12:54 PM	Old Building Foundation	Vegetation	Flat	old rd?	Yes	0.5	Native Soil
AD-1-82	12/16/2014 12:15:37 PM	Hummocky	Hummocky	Depression	trees bent surrounding due to disturbance	Yes	0.5	Native Soil
AD-1-83	12/16/2014 12:29:53 PM	Hummocky	Hummocky	Hummocky	old machine tracks?	Yes	1.0	
AD-1-84	12/16/2014 12:33:57 PM	Hummocky	Hummocky	Mound		Yes	0.5	Native Soil
AD-1-85	12/16/2014 12:36:36 PM	Hummocky	Hummocky	Depression	voids minimal recovery	Yes	0.5	Native Soil
AD-1-86	12/16/2014 12:40:01 PM	Hummocky	Hummocky	Mound	mound next to depression; voids/minimal recovery	Yes	0.5	Native Soil
AD-1-87	12/16/2014 2:26:47 PM	Fill Material	Vegetation	Flat	old access rd	Yes	0.5	Native Soil
AD-1-88	12/16/2014 2:30:40 PM	Hummocky	Vegetation	Flat	old access rd	Yes	0.5	Native Soil
AD-1-89	12/16/2014 2:49:27 PM	Hummocky	Hummocky	Depression	edge of original grade?	Yes	0.5	Native Soil
AD-1-90	12/16/2014 2:53:46 PM	Hummocky	Hummocky	Depression		Yes	0.5	Native Soil
AD-1-91	12/16/2014 3:07:02 PM	Hummocky	Hummocky	Depression	sloped grade towards wetland	Yes	0.5	Native Soil
AD-1-92	12/16/2014 3:10:49 PM	Hummocky	Hummocky	Mound	mound and boulder pile/edge of potential access road	No		
AD-1-93	12/16/2014 3:16:47 PM	Hummocky	Marshy	Stream	stagnant pond/wetlands	Yes	0.5	Native Soil
AD-1-94	12/16/2014 3:21:36 PM	Hummocky	Hummocky	Depression	depression on edge of access rd and mound	Yes	0.5	Native Soil

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NA - Not applicable

Appendix A - Table 2. Node Points Summary - Level 2
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Land Type	Ground Surface Type	Date Collected	General Observations	Hand Auger Depth (feet)	General Observations	Surface Refuse				Disturbed Ground		Paint Waste			
							Object Type	Amount	Condition	General Observations	Object Type	General Observations	Object Type	Size	Surface Type	General Observations
A-1					0.5	Native Soil										
A-1 [new]	Vegetation	Top of hill	5/9/2014 11:17:10 AM	roadside	0.5	Native Soil Fill	Trash Tires Construction Materials	Small (<2 feet)	NA	cans, plastic, fabric, bottles, metal frame [car seat?], cement	Hummocky	mounds of road debris				
A-2	Vegetation	Slope	5/9/2014 11:30:35 AM	iron rich water outlet	0.5	Native Soil Fill	Trash Tires Construction Materials	Small (<2 feet)	NA	7 tires, cement reservoir post and fencing, plastic bottles, glass, wrapper, concrete						
A-3	Vegetation	Slope	5/9/2014 11:38:41 AM		1.0	Fill Native Soil	Trash	Small (<2 feet)	NA	plastic, rusty metal, glass bottle, asphalt, cement reservoir post, wrappers, road cone, Styrofoam	Fill Material					
A-4	Vegetation	Steep	5/9/2014 11:50:02 AM	adjacent to railroad spur and culvert	1.0	Native Soil Fill	Construction Materials Trash	Small (<2 feet)	NA	cement beam, bottles, cans, plastic	Hummocky	a few small mounds		<12" in diameter	Surficial	in RR spur
AA-1	Vegetation	Flat	5/7/2014 1:39:03 PM	edge on stream, wooded area	0.5	Native Soil	Trash	Small (<2 feet)								
AA-10	Marshy	Flat	5/7/2014 2:51:35 PM	edge of marshy beaver pond	1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic bags and bottles						
AA-11	Vegetation				2.0	Fill										
AA-16					0.5	Native Soil	Drums Trash	Medium (2-5 feet)	Rusted/Pitted	burn barrel	Hummocky	mound and depression				
AA-2	Vegetation	Hummocky	5/7/2014 1:43:25 PM	wooded area	1.5	Native Soil	Trash	Small (<2 feet)	NA	plastic, Styrofoam, coffee cup	Hummocky	mounds				
AA-3	Vegetation	Flat	5/7/2014 1:47:19 PM		1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic bag, paper, Styrofoam	Hummocky	depression				
AA-4	Vegetation	Flat	5/7/2014 1:56:42 PM	wooded area	2.0	Native Soil	Trash	Small (<2 feet)	NA	plastic bottles, plastic bags						
AA-5	Vegetation	Flat	5/7/2014 2:06:00 PM	woodland area	1.5	Native Soil	Trash Tires	Small (<2 feet)	NA	plastic bags, confetti, chip bags, tires						
AA-6	Vegetation	Flat	5/7/2014 2:15:24 PM	woods	2.0	Native Soil	Trash	Small (<2 feet)	NA	plastic bags, bottles, aerosol can						
AA-7	Vegetation	Flat	5/7/2014 2:22:26 PM	some trash, top of steep slope	2.0	Native Soil	Trash	Small (<2 feet)	NA	plastic bags and bottles, aerosol cans						
AA-8	Vegetation	Slope	5/7/2014 2:27:44 PM	some garbage	1.5	Native Soil	Trash	Small (<2 feet)		confetti, plastic, bottles						
AA-9	Vegetation	Steep	5/7/2014 2:48:03 PM	wooded slope to marshy area	1.5	Native Soil	Trash	Small (<2 feet)	NA	bottles, plastic						
AB-1	Vegetation	Stream	5/7/2014 3:55:48 PM	flat area on stream bank	1.0	Native Soil										
AB-2	Vegetation	Flat	5/7/2014 3:52:49 PM		1.0	Native Soil										
AB-3	Vegetation	Flat	5/7/2014 3:46:02 PM	wood	1.0	Native Soil	Trash	Small (<2 feet)	NA	Styrofoam						
AB-4	Vegetation	Flat	5/7/2014 3:40:00 PM	woods	1.0	Native Soil	Trash	Medium (2-5 feet)	NA	household garbage bag, with plastic/ metal/ bottles						
AB-5	Vegetation	Flat	5/7/2014 3:36:54 PM	woods	1.0	Native Soil	Trash	Small (<2 feet)		Gatorade bottle						
AB-6	Vegetation	Flat	5/7/2014 3:30:46 PM	some depressions and household trash	1.5	Native Soil	Trash	Small (<2 feet)		cardboard food containers, plastic	Hummocky	depression				
AB-7	Vegetation	Flat	5/7/2014 3:27:13 PM	wooded area	1.5	Native Soil	Trash		NA	plastic bags, Styrofoam food containers						
AB-8	Vegetation	Slope	5/7/2014 3:15:12 PM	slope up from marsh	1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic bottles and bags, papers						
AB-9	Marshy	Flat	5/7/2014 3:08:15 PM	edge of marshy area	1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic bags,						
AC-1	Water	Stream	5/7/2014 4:02:16 PM	small island in stream	2.0	Native Soil										
AC-2	Marshy	Flat	5/7/2014 4:04:18 PM	next to stream	2.0	Native Soil	Trash	Small (<2 feet)	NA	plastic, packing foam						
AC-3	Vegetation	Flat	5/7/2014 4:06:59 PM	woods near marsh	1.0	Native Soil	Trash	Small (<2 feet)		plastic shreds of bags						
AC-4	Vegetation	Flat	5/7/2014 4:11:00 PM	edge of marshy area on flat ground	0.5	Native Soil					Hummocky	small mound				
AC-5	Vegetation	Slope	5/7/2014 4:00:19 PM		1.5	Native Soil	Trash	Small (<2 feet)	Empty	minimal Styrofoam	Hummocky	some small mounds				
AC-6	Vegetation	Flat	5/7/2014 3:52:44 PM	near edge of pond	1.5	Native Soil	Trash	Small (<2 feet)	NA	minimal plastic and Styrofoam						
AD-3	Marshy	Stream	5/7/2014 4:16:59 PM	inaccessible marshy line ad	NA											
B-1	Asphalt	Flat	5/9/2014 10:09:08 AM	side of road	NA		Trash	Small (<2 feet)	NA	cans and bottles	Asphalt					
B-2	Vegetation	Flat	5/9/2014 10:09:50 AM		0.5	Native Soil Fill	Trash	Small (<2 feet)	NA	plastic, bottles, cans, wrappers						
B-3	Vegetation	Flat	5/9/2014 10:24:47 AM		1.0	Fill	Trash	Small (<2 feet)	NA	wrappers, plastic, rim, rusty metal stakes, pipe	Fill Material					
B-4	Vegetation	Slope	5/9/2014 10:34:27 AM		1.5	Fill	Tires Trash Construction Materials	Small (<2 feet)	NA	Styrofoam, plastic, 3 tires, construction debris, gravel fill	Fill Material	gravel				
B-5	Vegetation	Steep	5/9/2014 10:43:35 AM		2.0	Native Soil Fill	Trash Tires Construction Materials	Small (<2 feet)	NA	plastic bags, mini tire, plastic pieces, rusty metal pipe	Fill Material					
B-6	Vegetation	Steep	5/9/2014 10:51:34 AM		1.5	Native Soil Fill	Trash Tires Construction Materials	Medium (2-5 feet)	NA	culvert remnants, wrappers, glass bottle, plate, rubber	Fill Material					
B-7	Vegetation	Slope	5/9/2014 11:00:43 AM	stream bank	1.0	Native Soil	Trash Tires	Small (<2 feet)	NA	Styrofoam, plastic, 1 tire						
C-1	Hummocky	Hummocky	4/4/2014 11:18:40 AM	roadside	0.5	Fill	Trash	5	NA		Hummocky	mound by road				
C-2	Vegetation	Slope	5/9/2014 9:21:16 AM		1.5	Native Soil Fill	Trash Tires	Small (<2 feet)	NA	bottle, asphalt, rusty pipe, rim, rusty muffler, 1 tire, glass bottles	Hummocky	access road; mound of road materials				

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NA - Not applicable

Appendix A - Table 2. Node Points Summary - Level 2
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Land Type	Ground Surface Type	Date Collected	General Observations	Hand Auger Depth (feet)	General Observations	Surface Refuse				Disturbed Ground		Paint Waste			
							Object Type	Amount	Condition	General Observations	Object Type	General Observations	Object Type	Size	Surface Type	General Observations
C-3	Vegetation	Slope	5/9/2014 10:02:00 AM		0.5	Native Soil Fill	Trash	Small (<2 feet)	NA	plastic bottles, plastic	Fill Material	mounds from work				
C-4	Vegetation	Flat	5/9/2014 9:48:08 AM	on top of culvert; adjacent to rock wall	0.5	Native Soil Fill	Trash	Small (<2 feet)	NA	Styrofoam, plastic, bottles, cans	Fill Material	culvert				
C-5	Rocks	Flat	4/4/2014 11:01:24 AM	top of culvert	0.5	Fill	Trash	3			Fill Material	culvert				
D-1	Hummocky	Depression	4/4/2014 9:20:33 AM		0.5	Debris Fill	Trash	11	NA		Hummocky					
D-2	Hummocky	Top of hill	4/4/2014 9:30:22 AM		0.5	Fill Native Soil	Trash	7	NA	tires 5	Fill Material	off side of road / edge woods				
D-3	Hummocky	Top of hill	4/4/2014 9:38:27 AM		2.0	Fill Native Soil	Trash	10	NA	tires	Fill Material					
D-4	Vegetation	Steep	4/4/2014 10:05:33 AM		1.5	Native Soil	Trash	3	NA	bottles						
D-5	Vegetation	Steep	4/4/2014 10:21:11 AM		1.5	Debris Native Soil	Trash	6	NA							
D-6	Vegetation	Flat	4/4/2014 10:39:20 AM		1.0	Native Soil	Trash	20	NA	tires/bottles/plastic						
E-1	Vegetation	Flat	4/3/2014 12:19:15 PM	next to road	0.5	Fill	Trash	7	NA	cans, bottles, plastic, tire						
E-2	Vegetation	Top of hill	4/3/2014 12:08:15 PM		1.0	Native Soil	Trash	10	NA	cans, bottles plastic, wrappers						
E-3	Vegetation	Steep	4/3/2014 11:49:14 AM		1.0	Native Soil	Trash	10	NA	tires, bottles, Christmas decorations, plastic, cement/asphalt						
E-4	Vegetation	Hummocky	4/3/2014 11:36:45 AM	elongated mound	1.5	Fill	Trash	1	NA	minimal; plastic	Fill Material	elongated mound				
E-5	Vegetation	Stream	4/3/2014 11:11:17 AM	stream bank	1.0	Native Soil	Trash	5	NA	minimal refuse; glass, plastic bottles						
F-1	Vegetation	Flat	4/3/2014 4:14:38 PM		0.5	Fill	Trash	10	NA	plastic bottles, cans, plastic pieces	Fill Material		Piece	<12" in diameter	Surficial Subsurface	mostly small pieces less than 3"
F-2	Vegetation	Hummocky	4/3/2014 3:59:51 PM		0.5	Fill	Trash	6	NA	can, hat, plastic, bottle, tire, golf ball	Hummocky		Piece	<12" in diameter	Subsurface Surficial	
F-3	Vegetation	Hummocky	4/3/2014 3:48:24 PM		0.5	Fill	Trash	2	NA	plastic bottle and bag	Hummocky		Continuous Flow	>12" in diameter	Surficial Subsurface	
F-4	Vegetation	Steep	4/3/2014 3:36:14 PM		0.5	Native Soil Fill	Tires	1	Full	asphalt also	Hummocky		Piece	<12" in diameter	Surficial Subsurface	just under 12 inches
F-5	Vegetation	Stream	4/3/2014 10:53:31 AM	stream bank	1.0	Native Soil	Trash	2	NA	plastic refuse						
G-1	Vegetation	Flat	4/3/2014 2:12:21 PM	side of road	0.5	Fill	Trash	10	NA	cans, bottles, plastic, paint can	Fill Material					
G-2	Vegetation	Hummocky	4/3/2014 2:22:03 PM		0.5	Fill	Trash	5	NA	cans, plastic, small tire	Hummocky		Piece	<12" in diameter	Surficial	
G-3	Vegetation	Top of hill	4/3/2014 2:34:40 PM		0.5	Fill	Trash	2	NA	tire, plastic	Fill Material					
G-4	Vegetation	Hummocky	4/3/2014 2:47:34 PM		0.5	Fill	Trash	5	NA	2 tires, plastic, Styrofoam	Hummocky		Piece	>12" in diameter	Surficial Subsurface	pieces of all sizes
G-5	Vegetation	Hummocky	4/3/2014 3:03:29 PM		0.5	Fill	Tires	2	NA	full and empty; rim	Hummocky		Continuous Flow	>12" in diameter	Surficial Subsurface	
G-6	Vegetation	Steep	4/3/2014 3:19:27 PM		0.5	Fill Native Soil	Construction Materials	4	NA	cement; trash and tires	Hummocky		Continuous Flow	>12" in diameter	Subsurface Surficial	
G-7	Vegetation	Stream	4/3/2014 10:27:33 AM	stream bank	1.0	Native Soil	Trash	3	Empty	bottles, cans			Piece	<3" in diameter	Surficial	
H-1	Rocks	Flat		roadway	0.5	Debris										
H-2	Rocks	Flat		gravel shoulder of road	0.5	Debris										
H-3	Vegetation	Top of hill		trash, vegetation, some gravel	0.5	Debris	Trash									
H-4	Vegetation	Flat		trash, household paint cans, bottles, tires	1.0	Debris Native Soil	Liquid Containers Tires Trash									
H-5	Vegetation	Flat		bottles, plastic	1.0	Debris Native Soil	Liquid Containers Trash									
H-6	Vegetation	Flat		car rim and a few glass bottles, minimal refuse	1.0	Native Soil	Liquid Containers Trash									
H-7	Vegetation	Steep	4/3/2014 9:47:51 AM		1.0	Native Soil	Tires	1	Full	rusted rim						
H-8	Vegetation	Steep	4/3/2014 9:57:02 AM		1.5	Native Soil	Construction Materials	2	Rusted/Pitted	plastic debris						
H-9	Vegetation	Stream	4/3/2014 10:13:43 AM	bank of stream	1.0	Native Soil	Tires	1	Full	also balloon and Snapple cap, minimal refuse						
I-1	Rocks	Flat	4/7/2014 10:54:02 AM	road	NA		Trash	Small (<2 feet)	NA	plastic						
I-2	Rocks	Flat	4/7/2014 10:58:36 AM	gravel pull off	0.5	Fill Debris	Trash	Small (<2 feet)	NA	plastic cups, paper, glass						
I-3	Vegetation	Hummocky	4/7/2014 11:25:19 AM		0.5	Debris Fill	Trash Tires	Small (<2 feet)	NA	bag of bones [picture belongs with this node], plastic, bottles	Hummocky					
I-4	Vegetation	Hummocky	4/7/2014 12:04:51 PM		0.5	Fill	Construction Materials Tires Trash	Large (>5 feet)	NA	cement, asphalt, bottles, pipe [3 or 4 ft long]	Fill Material	hummocky and fill				
I-5	Vegetation	Hummocky	4/7/2014 12:44:40 PM	base of hill	0.5	Fill	Tires Construction Materials Trash	Large (>5 feet)	NA	various sizes; cement blocks, bottles, plastic	Fill Material					
I-6	Vegetation	Flat	4/7/2014 1:20:30 PM		0.5	Fill Native Soil	Tires Trash	Small (<2 feet)	Empty	glass bottles						
I-7	Vegetation	Flat	4/7/2014 1:48:02 PM		0.5	Native Soil Fill	Trash	Small (<2 feet)	NA	glass bottles, bike tire; bottles buried in dirt						
I-8	Vegetation	Steep	4/9/2014 11:31:43 AM		0.5	Native Soil	Trash	Small (<2 feet)	NA	glass bottles, rubbery black material, Styrofoam						
I-9	Vegetation	Steep	4/9/2014 1:16:20 PM		0.5	Native Soil	Trash	Small (<2 feet)	NA	bottles						
J-1	Vegetation	Top of hill	4/8/2014 11:31:14 AM	glass bottles. asphalt	0.5	Debris	Trash	Small (<2 feet)	NA		Fill Material					

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Appendix A - Table 2. Node Points Summary - Level 2
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Land Type	Ground Surface Type	Date Collected	General Observations	Hand Auger Depth (feet)	General Observations	Surface Refuse				Disturbed Ground		Paint Waste			
							Object Type	Amount	Condition	General Observations	Object Type	General Observations	Object Type	Size	Surface Type	General Observations
J-10	Vegetation	Steep	4/9/2014 10:32:44 AM		0.5	Native Soil	Tires Trash	Small (<2 feet)	Rusted/Pitted	pieces of a rusty drum, rusty metal pieces						
J-11	Vegetation	Steep	4/9/2014 11:14:26 AM		0.5	Native Soil	Trash Construction Materials	Small (<2 feet)	NA	red beam remnants, bottles						
J-2	Vegetation	Top of hill	4/8/2014 11:29:42 AM		0.5	Fill Debris	Trash	Small (<2 feet)	NA	glass and plastic bottles, plastic bags	Fill Material					
J-3	Vegetation	Top of hill	4/8/2014 11:13:13 AM	leaves and large rock (abour1-2 ft dia) ground cover	0.5	Fill Debris	Trash	Small (<2 feet)	NA	Plant potter,glass bottles.						
J-4	Vegetation	Hummocky	4/8/2014 10:50:00 AM		0.5	Fill	Trash Construction Materials	Small (<2 feet)	NA	can , bottles, balls, plastic	Hummocky					
J-5	Vegetation	Hummocky	4/8/2014 10:45:51 AM		0.5	Fill	Trash	Small (<2 feet)	NA	cans, bottles, plastic	Hummocky					
J-6	Vegetation	Hummocky	4/8/2014 10:14:49 AM		0.5	Fill	Trash Tires	Small (<2 feet)	NA	bottles, cans, deflated tire, plastic	Hummocky					
J-7	Vegetation	Hummocky	4/8/2014 9:12:45 AM		0.5	Fill	Trash	Small (<2 feet)	NA	plastic, bottles, plant buckets	Hummocky					
J-8	Vegetation	Hummocky	4/7/2014 3:48:03 PM		0.5	Fill	Trash	Small (<2 feet)	NA	glass bottle	Hummocky					
J-9	Vegetation	Hummocky	4/7/2014 2:32:05 PM		0.5	Native Soil Fill	Trash Drums	Small (<2 feet)	Rusted/Pitted	rusted and crinkled drum; glass bottles	Hummocky					
K-1	Rocks	Flat	4/8/2014 12:21:20 PM	road												
K-10	Vegetation	Top of hill	4/8/2014 3:07:06 PM		0.5	Fill Native Soil	Trash Tires	Medium (2-5 feet)	NA	rusty pipe sticking out of the ground, plastic, cans, bottles; some buried; asphalt	Fill Material	blue metallic fill similar to mound in k9				
K-11	Vegetation	Top of hill	4/8/2014 3:51:06 PM		0.5	Fill Native Soil	Trash Construction Materials	Small (<2 feet)	Rusted/Pitted	rusty metal and pipe, bottles, asphalt; buried trash; rusty metal wire and metal frame	Fill Material					
K-12	Vegetation	Steep	4/9/2014 8:58:39 AM		0.5	Fill Native Soil Debris	Trash Construction Materials	Small (<2 feet)	NA	bottles, rusty pipe	Fill Material					
K-13	Vegetation	Steep	4/9/2014 9:20:19 AM	mound at base of hill	0.5	Native Soil Fill	Trash			bottles, plastic	Hummocky					
K-14	Vegetation	Flat	4/9/2014 9:52:20 AM	4 medium sized down trees [pictures from k13 belong here]	0.5	Native Soil	Trash Tires	Small (<2 feet)	NA	down trees, bottles						
K-15	Vegetation	Flat	4/9/2014 10:18:05 AM	next to stream	1.0	Native Soil	Trash	Small (<2 feet)	NA	toy, bottles						
K-2	Vegetation	Top of hill	4/8/2014 12:22:46 PM		1.0	Fill Debris	Trash Construction Materials Tires	Small (<2 feet)	NA	cardboard, asphalt, cans, bottles, Styrofoam, 1 rusted tire	Fill Material					
K-3	Vegetation	Flat	4/8/2014 12:42:50 PM	base of hill	1.0	Fill Debris	Tires Trash	Small (<2 feet)	NA	bottles, cans, 10 tires, paper	Fill Material					
K-4	Vegetation	Flat	4/8/2014 12:58:59 PM	gentle hill	0.5	Fill	Trash	Small (<2 feet)	NA	tires,plastic bottles and bags	Fill Material					
K-5	Vegetation	Flat	4/8/2014 1:30:42 PM	gentle slope	0.5	Fill Debris	Trash	Small (<2 feet)	NA	bottles	Fill Material					
K-6	Vegetation	Flat	4/8/2014 1:33:34 PM		0.5	Fill	Trash	Small (<2 feet)	NA	glass bottles, golf balls	Fill Material					
K-7	Vegetation	Hummocky	4/9/2014 12:44:28 PM		0.5	Native Soil Fill	Trash Construction Materials	Small (<2 feet)	NA	cement block, tarps, paper, plastic, bottles	Hummocky					
K-8	Vegetation	Hummocky	4/8/2014 2:10:38 PM		0.5	Fill Native Soil	Trash	Small (<2 feet)	NA	glass bottles, plastic, rusted metal wire, asphalt in mound	Hummocky					
K-9	Vegetation	Hummocky	4/8/2014 2:28:23 PM		0.5	Fill Native Soil	Trash Construction Materials	Small (<2 feet)	NA	old glass bottles that say re-use [Charlene remembers using], rusty pipe, cement, broken glass, asphalt, roof shingles	Hummocky	edge of k-8 hummock	Piece	<12" in diameter	Surficial	
L-1	Vegetation	Top of hill	4/10/2014 12:48:37 PM		1.5	Fill Debris	Trash Construction Materials	Small (<2 feet)	NA	bottles, cans, cement blocks, asphalt, plastic	Fill Material					
L-10	Vegetation	Steep	4/9/2014 4:00:38 PM	gentle slope	1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic, glass						
L-11	Vegetation	Steep	4/9/2014 3:48:00 PM		0.5	Native Soil	Trash	Small (<2 feet)	NA	plastic rusty metal cans, glass						
L-12	Vegetation	Steep	4/9/2014 3:33:33 PM		1.5	Native Soil	Trash	Small (<2 feet)	NA	rusty lids, glass						
L-13	Vegetation	Steep	4/9/2014 3:14:08 PM		1.5	Native Soil	Trash	Small (<2 feet)	NA	glass bottle, plastic, rusty metal lids and pieces						
L-14	Vegetation	Steep	4/9/2014 2:52:47 PM		0.5	Native Soil	Trash	Small (<2 feet)	NA	broken sink, ceramic, glass						
L-15	Vegetation	Steep	4/9/2014 2:34:11 PM	gentle slope	0.5	Native Soil	Trash Construction Materials	Small (<2 feet)	NA	glass, brick, cement block,						
L-16	Vegetation	Flat	4/9/2014 2:14:12 PM		1.0	Native Soil	Tires Trash	Small (<2 feet)	Rusted/Pitted	bottles	Hummocky	one elongated mound				
L-17	Vegetation	Flat	4/9/2014 1:59:25 PM		1.0	Native Soil	Tires Trash	Small (<2 feet)	NA	minimal plastic and glass						
L-18	Vegetation	Stream	4/9/2014 1:41:24 PM	stream bank	1.0	Native Soil				down trees						
L-2	Vegetation	Steep	4/10/2014 12:32:52 PM		2.0	Fill Native Soil	Trash	Small (<2 feet)	NA	cement block, glass, plastic, misc. household trash	Fill Material					
L-3	Vegetation	Flat	4/10/2014 11:05:36 AM	gentle slope	0.5	Fill Native Soil	Trash Construction Materials	Small (<2 feet)	NA	cement blocks, asphalt, paper, plastic, glass bottles, rusty metal, plastic tub remnants						
L-4	Vegetation	Flat	4/10/2014 10:52:17 AM	gentle slope	2.0	Native Soil	Trash	Small (<2 feet)	NA	plastic, bottles, hub cap						

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							Object Type	Amount	Condition	General Observations	Object Type	General Observations	Object Type	Size	Surface Type	General Observations
L-5	Vegetation	Flat	4/10/2014 10:35:42 AM	gentle slope	1.0	Native Soil	Trash	Small (<2 feet)	NA	paper, plastic, glass, tarp shreds						
L-6	Vegetation	Flat	4/10/2014 10:18:22 AM	gentle slope	1.0	Native Soil	Trash	Small (<2 feet)	NA	rusty metal wire out of tree						
L-7	Vegetation	Flat	4/10/2014 9:59:13 AM	slight slope	1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic, bottles	Hummocky	small hummocks				
L-8	Vegetation	Flat	4/10/2014 9:43:41 AM	gentle slope	1.0	Native Soil	Trash	Small (<2 feet)	NA	rusted can, bottles, plastic	Hummocky	slightly hummocky				
L-9	Vegetation	Steep	4/9/2014 4:17:15 PM	gentle slope	1.5	Native Soil	Trash	Small (<2 feet)	NA	glass bottles plastic bag, possible odor						
M-1	Rocks	Flat	4/14/2014 2:10:13 PM	driveway												
M-10	Vegetation	Flat	4/10/2014 3:37:33 PM		1.0	Native Soil	Trash	Small (<2 feet)	NA	bottles, paper						
M-11	Vegetation	Flat	4/10/2014 3:55:36 PM		1.0	Native Soil	Trash	Small (<2 feet)	NA	minimal glass and plastic, Styrofoam						
M-12	Vegetation	Flat	4/11/2014 9:56:37 AM	gentle slope	1.0	Native Soil	Trash	Small (<2 feet)		minimal paper, plastic						
M-13	Vegetation	Flat	4/11/2014 10:12:01 AM	gentle slope	1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic, glass, cardboard, sheet plastic						
M-14	Vegetation	Flat	4/11/2014 10:27:09 AM	gentle slope	0.5	Native Soil	Trash	Small (<2 feet)	NA	cans, bottle, plastic, ball						
M-15	Vegetation	Flat	4/11/2014 10:48:38 AM		1.5	Native Soil	Trash	Small (<2 feet)	Rusted/Pitted	plastic, beer cans, two empty rusted paint cans		elongated trench feature parallel to stream				
M-16	Vegetation	Flat	4/11/2014 11:14:54 AM		1.0	Native Soil	Trash	Small (<2 feet)	Empty	minimal plastic, glass	Hummocky	elongate mound				
M-17	Vegetation	Flat	4/11/2014 11:19:21 AM		1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic, glass, rusty lid, rusty lunch tray	Hummocky	elongate mound				
M-2	Rocks	Top of hill	4/14/2014 2:07:21 PM		0.5	Fill	Trash	Small (<2 feet)	NA	plastic, asphalt, bottles, multiple wires, rusty can	Fill Material					
M-3	Vegetation	Steep	4/14/2014 1:59:03 PM	gentle slope	0.5	Native Soil	Trash	Small (<2 feet)	NA	bottles, plastic, asphalt						
M-4	Vegetation	Steep	4/10/2014 1:09:45 PM		1.0	Native Soil Fill	Trash Construction Materials	Small (<2 feet)	NA	asphalt, glass, plastic	Fill Material					
M-5	Vegetation	Steep	4/10/2014 1:38:11 PM		1.5	Native Soil Fill	Trash	Small (<2 feet)	NA	glass bottles	Fill Material					
M-6	Vegetation	Steep	4/10/2014 1:42:50 PM	gentle slope	1.5	Native Soil Fill	Trash	Small (<2 feet)	NA	glass bottles						
M-7	Vegetation	Steep	4/10/2014 2:19:01 PM	gentle slope	1.0	Native Soil	Trash	Small (<2 feet)	NA	glass bottles	Hummocky	one small hummock				
M-8	Vegetation	Steep	4/10/2014 2:56:23 PM	gentle slope	1.0	Native Soil	Trash	Small (<2 feet)	NA	minimal glass and plastic, Styrofoam						
M-9	Vegetation	Steep	4/10/2014 3:06:45 PM	gentle slope	1.0	Native Soil	Trash	Small (<2 feet)	NA	minimal glass and plastic						
N-1	Vegetation	Top of hill	4/29/2014 3:54:48 PM	side of the road	1.0	Fill	Trash Construction Materials	Small (<2 feet)	NA	wrappers, bottles, cans, plastic, asphalt	Fill Material					
N-10	Vegetation	Flat	4/11/2014 12:26:07 PM	gentle slope	0.5	Native Soil Fill	Trash	Small (<2 feet)	NA	rusty metal, bottles						
N-11	Vegetation	Flat	4/11/2014 12:57:19 PM	large rock and rock pile	0.5	Native Soil	Trash	Small (<2 feet)	NA	minimal						
N-12	Vegetation	Steep	4/11/2014 1:35:46 PM		0.5	Native Soil Fill	Trash	Small (<2 feet)	NA	minimal	Fill Material	large rock with pits filled in with 6 inch diameter rocks				
N-13	Vegetation	Steep	4/11/2014 1:07:45 PM	nearby swamp	0.5	Native Soil Fill	Trash	Small (<2 feet)	NA	minimal	Fill Material	large rock and rock fill				
N-14	Vegetation	Flat	4/11/2014 1:47:10 PM		0.5	Fill Native Soil	Trash	Small (<2 feet)	NA	minimal	Fill Material	rock pile/wall				
N-15	Vegetation	Flat	4/11/2014 2:03:20 PM		0.5	Native Soil	Trash	Small (<2 feet)	NA	minimal, large rocks everywhere						
N-16	Vegetation	Flat	4/11/2014 2:12:26 PM		0.5	Native Soil				many large boulders						
N-17	Vegetation	Flat	4/11/2014 2:45:24 PM		1.0	Native Soil	Trash Tires	Small (<2 feet)	NA	toys, plastic, paper	Hummocky	small hummocks near tree roots				
N-18	Vegetation	Flat	4/11/2014 2:45:59 PM		1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic, paper, glass						
N-2	Vegetation	Steep	4/29/2014 3:49:26 PM	rocky	1.0	Native Soil Fill	Trash Construction Materials	Small (<2 feet)	NA	fence, bottles, wrappers, asphalt, plastic						
N-3	Vegetation	Hummocky	4/29/2014 3:42:12 PM	mound	1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic bottles, fence, Styrofoam, bags, wrappers, cement	Hummocky	mound				
N-4	Vegetation	Hummocky	4/29/2014 3:36:33 PM	near road	1.0	Fill Native Soil	Trash Construction Materials	Small (<2 feet)	NA	asphalt, bottles, wires, toy	Hummocky	mound				
N-5	Rocks	Flat	4/14/2014 2:14:24 PM	driveway	NA											
N-6	Vegetation	Top of hill	4/14/2014 12:58:24 PM		0.5	Fill Debris	Trash	Small (<2 feet)	NA	cans, bottles, asphalt	Fill Material					
N-7	Vegetation	Steep	4/14/2014 1:22:15 PM	gentle slope	0.5	Debris Fill Native Soil	Trash	Small (<2 feet)	NA	minimal						
N-8	Vegetation	Steep	4/14/2014 1:33:29 PM	gentle slope	1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic, glass bottles						
N-9	Vegetation	Flat	4/14/2014 1:37:39 PM		0.5	Native Soil	Trash	Small (<2 feet)	NA	minimal plastic, glass, rusty metal transformer						
O-1	Vegetation	Top of hill	4/29/2014 4:16:40 PM	side of road	1.0	Native Soil Fill	Trash Construction Materials Tires	Small (<2 feet)	NA	cement bumper, asphalt, cans, bottles, plastic, fencing						
O-10	Vegetation	Flat	4/14/2014 11:45:15 AM	2 depressions - wet muddy soil core	2.0	Native Soil	Trash	Small (<2 feet)	NA	plastic, bottles	Hummocky	depressions				

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Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Land Type	Ground Surface Type	Date Collected	General Observations	Hand Auger Depth (feet)	General Observations	Surface Refuse				Disturbed Ground		Paint Waste			
							Object Type	Amount	Condition	General Observations	Object Type	General Observations	Object Type	Size	Surface Type	General Observations
O-11	Vegetation	Top of hill	4/14/2014 11:32:04 AM		1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic						
O-12	Vegetation	Steep	4/14/2014 11:18:52 AM	gentle slope	0.5	Native Soil	Trash	Small (<2 feet)	NA	minimal plastic						
O-13	Vegetation	Steep	4/14/2014 11:04:48 AM	gentle slope	1.0	Native Soil	Trash	Small (<2 feet)	NA	minimal plastic						
O-14	Vegetation	Steep	4/14/2014 10:48:13 AM	gentle slope	0.5	Native Soil Fill	Trash	Small (<2 feet)	NA	tin can, plastic						
O-15	Vegetation	Flat	4/14/2014 10:31:44 AM	"road"	0.5	Native Soil Fill	Trash	Small (<2 feet)	NA	plastic bottles	Fill Material					
O-16	Vegetation	Flat	4/14/2014 10:09:32 AM	area is flat but appears to be built up, almost like an old access road. Trees are also younger here. large half to 1 ft sized rocks building up the "road"	0.5	Native Soil Fill	Trash	Small (<2 feet)	NA	minimal plastic	Fill Material					
O-17	Vegetation	Flat	4/14/2014 9:54:04 AM		0.5	Native Soil	Trash	Small (<2 feet)	NA	minimal, a lot of 6 inch to 1 ft sized rock						
O-18	Marshy	Flat	4/14/2014 9:46:01 AM	swampy grey colored soil	1.5	Native Soil	Trash	Small (<2 feet)	NA	minimal household trash						
O-19	Vegetation	Flat	4/11/2014 3:36:07 PM		0.5	Native Soil	Trash	Small (<2 feet)	NA	minimal plastic						
O-2	Vegetation	Steep	5/1/2014 10:58:00 AM		0.5	Native Soil Fill	Trash Construction Materials Tires	Small (<2 feet)	NA	glass bottles, reservoir fencing, plastic, plastic bottles, cans, asphalt	Hummocky	some small mounds				
O-3	Vegetation	Steep	5/1/2014 10:46:47 AM		0.5	Fill	Trash Construction Materials	Small (<2 feet)	NA	fencing, rusty metal, bottles, fabric, 1 tire, plastic, asphalt						
O-4	Vegetation	Steep	5/1/2014 10:18:48 AM	rocky	1.0	Native Soil Fill	Trash Tires Construction Materials	Small (<2 feet)	NA	plastic, bottles, rusty bike tire, rusty metal, seat cushion, rusty hoe, asphalt, fencing, springs, fabric, Styrofoam						
O-5	Vegetation	Steep	5/1/2014 10:07:17 AM		1.0	Native Soil Fill	Trash	Small (<2 feet)	NA	Styrofoam, chip wrappers, bottles [glass and plastic], plastic bags, metal pipe	Hummocky	depression				
O-6	Vegetation	Steep	5/1/2014 9:53:55 AM		1.0	Native Soil Fill	Trash	Small (<2 feet)	NA	plastic tub and bag, small tire, bottles	Hummocky	2 depressions				
O-7	Vegetation	Steep	5/1/2014 9:37:46 AM	adjacent to driveway	1.5	Native Soil Fill	Trash	Small (<2 feet)	NA	solar light, fence, bottles, wrappers	Hummocky	a few small mounds				
O-8	Rocks	Flat	4/14/2014 2:17:15 PM	driveway												
O-9	Vegetation	Flat	4/14/2014 11:52:27 AM		1.0	Native Soil	Trash	Small (<2 feet)	NA	asphalt, plastic, rusty metal, cement	Hummocky	mound of debris from road				
P-1	Hummocky	Hummocky	5/1/2014 11:08:05 AM	edge of road, behind guardrail	0.5	Fill	Trash Construction Materials	Large (>5 feet)	NA	bottles, cans, piece of fence, piece of asphalt, piece of curb						
P-10	Rocks	Flat	4/14/2014 2:20:16 PM	driveway												
P-11	Rocks	Flat	4/14/2014 2:26:41 PM		0.5	Native Soil	Trash Construction Materials	Large (>5 feet)	NA	wood pallets, asphalt, asphalt machine, cans	Fill Material	mound of tree debris next to driveway				
P-12	Vegetation	Flat	4/14/2014 2:43:05 PM		0.5	Native Soil	Trash	Small (<2 feet)	NA	minimal						
P-13	Vegetation	Flat	4/14/2014 2:56:36 PM		1.0	Native Soil	Trash	Small (<2 feet)	NA	minimal, rusty metal pieces						
P-14	Vegetation	Top of hill	4/14/2014 3:33:51 PM		0.5	Native Soil	Trash	Small (<2 feet)	NA	minimal						
P-15	Vegetation	Steep	4/14/2014 3:44:50 PM	located in an area of rock vegetation	0.5	Native Soil										
P-16	Vegetation	Steep	4/14/2014 3:59:00 PM	point located near a rock outcrop	0.5	Native Soil	Tires	Medium (2-5 feet)	Empty	no rim on tire						
P-17	Vegetation	Flat	4/14/2014 4:11:44 PM	possible evidence of a road-like features. located near a rock outcrop	0.5	Native Soil	Trash	Small (<2 feet)	NA	some plastic tarp						
P-18	Vegetation	Flat	4/15/2014 9:42:19 AM		0.5	Native Soil	Trash	Small (<2 feet)	NA	plastic	Fill Material	rocks building up the "road"				
P-19	Hummocky	Hummocky	4/29/2014 9:45:27 AM	on the edge of stream, sheen present in stream	0.5	Native Soil	Trash	Small (<2 feet)	NA	black plastic bag	Hummocky	some rocks, near stream				
P-2	Hummocky	Hummocky	5/1/2014 11:02:29 AM	near edge of road bank	0.5	Native Soil	Trash Construction Materials	Small (<2 feet)	NA	cans, bottles, steel cable, pieces of asphalt						
P-20	Vegetation	Flat	4/29/2014 10:01:48 AM		0.5	Native Soil										
P-21	Vegetation	Hummocky	4/29/2014 10:14:45 AM	young trees, some large boulders	0.5	Native Soil										
P-22	Vegetation	Flat	4/29/2014 10:20:54 AM		0.5	Native Soil										

Notes:
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Hand augers were not advanced in some locations due to rocks/gravel, asphalt, water, debris, or thick vegetation including the presence of dense tree roots.
NA - Not applicable

Appendix A - Table 2. Node Points Summary - Level 2
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Land Type	Ground Surface Type	Date Collected	General Observations	Hand Auger Depth (feet)	General Observations	Surface Refuse				Disturbed Ground		Paint Waste			
							Object Type	Amount	Condition	General Observations	Object Type	General Observations	Object Type	Size	Surface Type	General Observations
P-23	Vegetation	Flat	4/29/2014 10:46:38 AM		0.5	Native Soil	Construction Materials	Medium (2-5 feet)	NA	rusted metal and railroad ties on stream bank [likely washed down from upstream], golf ball						
P-3	Hummocky	Hummocky	5/1/2014 10:58:03 AM	some large boulders, trash	1.0	Native Soil	Trash	Medium (2-5 feet)	NA	wrappers, plastic bottles	Hummocky	depression				
P-4	Hummocky	Hummocky	5/1/2014 10:44:56 AM	some rocks, some trash	1.0	Native Soil	Trash	Medium (2-5 feet)	NA	plastic, cans	Hummocky	mound				
P-5	Hummocky	Steep	5/1/2014 10:11:23 AM		1.0	Native Soil	Trash	Medium (2-5 feet)	NA	cans, plastic bottles, glass bottles (broken)						
P-6	Hummocky	Hummocky	5/1/2014 9:59:21 AM	2 mounds	1.0	Native Soil	Trash	Medium (2-5 feet)	NA	dog food, cans, Styrofoam, plastic	Hummocky	2 mounds				
P-7	Hummocky	Hummocky	5/1/2014 9:46:05 AM		0.5	Fill Native Soil	Trash	Medium (2-5 feet)	NA	some cans, potato chip bags						
P-8	Hummocky	Hummocky	5/1/2014 9:39:33 AM	relatively flat	0.5	Native Soil										
P-9	Hummocky	Hummocky	5/1/2014 9:35:25 AM	bank of asphalt road; some areas of branch piles and gravel piles	0.5	Native Soil	Trash	Small (<2 feet)	NA							
Q-1	Vegetation	Hummocky	5/1/2014 11:23:39 AM	on side of the road	0.5	Fill	Trash Construction Materials	Small (<2 feet)	NA	plastic, Styrofoam, road debris, asphalt, bottles	Hummocky	depression				
Q-10	Vegetation	Flat	4/16/2014 11:42:29 AM	old access road and rock wall adjacent/parallel; sewer	1.5	Native Soil Fill	Trash	Small (<2 feet)	NA	bottles, rusty metal	Fill Material	rock wall				
Q-11	Rocks	Flat	4/16/2014 11:38:48 AM	driveway with dumpster	NA											
Q-12	Rocks	Flat	4/16/2014 11:35:15 AM	driveway	NA											
Q-13	Rocks	Flat	4/16/2014 11:33:33 AM	driveway	NA											
Q-14	Rocks	Steep	4/16/2014 11:30:53 AM	backside of mound	NA		Trash	Small (<2 feet)	NA	plastic, glass	Fill Material	fill from driveway				
Q-15	Rocks	Steep	4/16/2014 11:03:03 AM	on top of mound	NA		Trash	Small (<2 feet)		asphalt, plastic, bottle	Fill Material	large mound of fill used to construct driveway; rusted tractor and dumpster				
Q-16	Vegetation	Flat	4/16/2014 10:40:58 AM		1.0	Native Soil	Trash Construction Materials	Small (<2 feet)	NA	rusty metal and metal mesh		one small depression ~4 ft diameter; down tree and tree debris mound with rocks				
Q-17	Vegetation	Flat	4/16/2014 9:43:48 AM	on top of rock outcrop	1.0	Native Soil	Trash	Medium (2-5 feet)	Rusted/Pitted	rusty metal, metal mesh, glass bottles						
Q-18	Vegetation	Flat	4/15/2014 11:02:25 AM	gentle slope	0.5	Native Soil	Trash	Small (<2 feet)	Empty	plastic	Hummocky	two minor hummocks around trees and depression				
Q-19	Vegetation	Steep	4/15/2014 10:06:17 AM	large rock outcrop ~35 ft	0.5	Native Soil	Tires	Medium (2-5 feet)	Empty	2						
Q-2	Vegetation	Top of hill	5/1/2014 11:11:20 AM		0.5	Fill	Trash Construction Materials	Small (<2 feet)	NA	plastic bags, utility pole, multiple tires, cans, bottle, asphalt	Hummocky	mounds				
Q-20	Vegetation	Steep	4/29/2014 2:39:18 PM	adjacent to pond/swamp, one depression up hill	1.0	Native Soil	Tires	Medium (2-5 feet)	Empty	2, cans		depression				
Q-21	Marshy	Flat	4/29/2014 2:56:05 PM	marshy with some angular blast rocks on the edges	1.0	Native Soil	Trash	Small (<2 feet)	NA	can, glass						
Q-22	Marshy	Flat	4/29/2014 3:07:10 PM	slightly marshy region between larger marshes	0.5	Native Soil	Trash Tires	Small (<2 feet)	NA	plastic						
Q-23	Marshy	Flat	4/29/2014 3:17:00 PM	large marshy region with down trees	2.0	Native Soil										
Q-24	Vegetation	Flat	4/29/2014 11:35:15 AM	bank of stream	NA											
Q-25	Vegetation	Flat	4/29/2014 11:25:38 AM		1.0	Native Soil					Hummocky	some small mounds				
Q-26	Vegetation	Flat	4/29/2014 11:21:39 AM		1.5	Native Soil					Hummocky	some small mounds				
Q-27	Vegetation	Flat	4/29/2014 11:00:51 AM	a few small mounds	0.5	Native Soil	Trash	Small (<2 feet)	NA	black pipe						
Q-3	Vegetation	Steep	4/16/2014 3:35:01 PM	bank near edge of asphalt paved active road (Margaret king)	0.5	Native Soil Fill	Trash Tires	Small (<2 feet)	NA	asphalt, cans, bottles, metal, one tire without rim	Hummocky	one mound present. took soil core in mound showing native soil and fill material				
Q-4	Vegetation	Steep	4/16/2014 3:28:32 PM		1.0	Native Soil	Trash Tires	Small (<2 feet)	NA	2 tires, bottles, plastic		2 depressions ~2 ft				

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NA - Not applicable

Appendix A - Table 2. Node Points Summary - Level 2
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Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Land Type	Ground Surface Type	Date Collected	General Observations	Hand Auger Depth (feet)	General Observations	Surface Refuse				Disturbed Ground		Paint Waste			
							Object Type	Amount	Condition	General Observations	Object Type	General Observations	Object Type	Size	Surface Type	General Observations
Q-5	Vegetation	Steep	4/16/2014 3:00:56 PM		1.0	Native Soil	Trash	Small (<2 feet)	NA	bottles						
Q-6	Vegetation	Steep	4/16/2014 2:58:10 PM		1.5	Native Soil										
Q-7	Vegetation	Steep	4/16/2014 2:36:29 PM		1.0	Native Soil	Trash	Small (<2 feet)	NA	minimal bottles and plastic						
Q-8	Vegetation	Steep	4/16/2014 1:55:18 PM		1.0	Native Soil	Trash	Small (<2 feet)	Empty	bottles, rusted metal, plastic						
Q-9	Vegetation	Steep	4/16/2014 1:49:58 PM		1.0	Native Soil Fill	Trash	Small (<2 feet)	NA	bottles [many buried], plastic, cables	Hummocky	4 ft wide depression				
R-1	Hummocky	Hummocky	5/2/2014 9:53:13 AM	edge of road, area raised off edge of road	1.5	Native Soil	Trash Construction Materials	Large (>5 feet)	NA	bottles, plastic, pieces of metal	Hummocky	raised bank off road				
R-10	Hummocky	Hummocky	5/1/2014 2:27:55 PM	node near driveway	0.5	Native Soil	Trash Construction Materials	Large (>5 feet)	NA	pieces of asphalt, piece of fence, bottles, trash	Hummocky	mound of gravel				
R-11	Hummocky	Hummocky	5/1/2014 2:07:05 PM		1.0	Native Soil	Trash Tires	Large (>5 feet)	Rusted/Pitted	6 tires, rusted paint can, glass bottles, wrappers, plastic	Hummocky	small mound				
R-12	Hummocky	Hummocky	5/1/2014 1:51:10 PM	down trees	0.5	Native Soil	Tires	Large (>5 feet)	Rusted/Pitted	3 tires	Hummocky	down trees				
R-13	Hummocky	Hummocky	5/1/2014 1:49:35 PM		1.0	Native Soil	Trash	Small (<2 feet)	NA	glass bottles	Hummocky	depression				
R-14	Hummocky	Hummocky	5/1/2014 1:37:22 PM	native forest	1.0	Native Soil										
R-15	Hummocky	Hummocky	5/1/2014 11:26:49 AM		0.5	Native Soil	Tires Trash	Small (<2 feet)	Empty	one tire, bottles, wrappers						
R-16	Rocks	Steep	5/1/2014 11:26:10 AM	side of rock wall	NA											
R-17	Vegetation	Flat	4/29/2014 4:08:51 PM	potential old road between woods and building	0.5	Native Soil	Trash	Small (<2 feet)	NA	potato chip bag	Hummocky	area between building and rock wall				
R-18	Hummocky	Flat	5/1/2014 9:26:50 AM	garage building	NA											
R-19	Hummocky	Flat	5/1/2014 9:26:21 AM	asphalt pavement	NA											
R-2	Vegetation	Hummocky	5/2/2014 9:43:01 AM	roadside	1.0	Native Soil Fill	Trash	Small (<2 feet)	NA	rim, cans, bottles, plastic bags and bottles	Hummocky	a few mounds				
R-20	Hummocky	Flat	5/1/2014 9:25:36 AM	asphalt pavement	NA											
R-21	Hummocky	Flat	5/1/2014 9:24:31 AM	asphalt parking lot	NA											
R-22	Vegetation	Flat	4/29/2014 3:56:24 PM	edge of fence line, edge of asphalt	0.5	Native Soil										
R-23	Hummocky	Flat	4/29/2014 3:52:06 PM	edge of asphalt and access road	NA		Construction Materials	Large (>5 feet)	NA	asphalt roller machine	Hummocky	pile of gravel				
R-24	Vegetation	Flat	4/29/2014 3:47:18 PM	middle of access road	1.0	Fill	Construction Materials	Medium (2-5 feet)	NA	pieces of concrete	Hummocky	mound				
R-25	Hummocky	Hummocky	4/29/2014 3:42:30 PM	some rocks, edge of access road, trash pile with branches and some scrap metal	0.5	Native Soil	Construction Materials	Medium (2-5 feet)	NA	some pieces of scrap metal (broken down fence), electrical wire						
R-26	Hummocky	Hummocky	4/29/2014 3:35:56 PM	edge of potential access road, built up mounds of gravel on edge of access road	0.5	Native Soil	Trash	Small (<2 feet)	NA	some bags						
R-27	Hummocky	Hummocky	4/29/2014 3:26:05 PM	native forest	0.5	Native Soil	Trash	Small (<2 feet)	NA	some plastic bags	Hummocky	pile of gravel				
R-28	Hummocky	Hummocky	4/29/2014 3:19:23 PM	native forest	0.5	Native Soil	Trash	Small (<2 feet)	NA	plastic bags	Hummocky	pile of chopped wood				
R-29	Hummocky	Hummocky	4/29/2014 3:03:27 PM	one depression, one mound	1.0	Native Soil					Hummocky	one depression, one mound				
R-3	Hummocky	Hummocky	5/2/2014 9:40:15 AM	off road, 2 small mounds, some large rocks	1.0	Native Soil	Trash Construction Materials	Medium (2-5 feet)	NA	bottles. cans, plastic bags, sign post	Hummocky	2 small mounds				
R-30	Hummocky	Hummocky	4/29/2014 2:52:59 PM	one large depression surrounded with blast rock towards back of depression	0.5	Native Soil	Trash Liquid Containers	Large (>5 feet)	NA	2 bottles of motor oil, piece of conduit pipe, piece of barbed wire, pieces of blast rock	Hummocky	large depression, surrounded by blast rock				
R-31	Hummocky	Hummocky	4/29/2014 2:48:23 PM	relatively flat area, up the ridge from sunken swamp area	0.5	Native Soil	Trash	Small (<2 feet)	NA	old sock						
R-32	Hummocky	Hummocky	4/29/2014 12:31:03 PM	off edge of marsh/muck, large rocks in area	1.5	Native Soil	Trash	Small (<2 feet)	NA	2 bottles						
R-33	Marshy	Stream	4/29/2014 12:29:26 PM	node located in marshy area												
R-34	Vegetation	Flat	4/29/2014 11:47:56 AM	adjacent to stream	0.5	Native Soil					Hummocky	adjacent to access road				
R-35	Hummocky	Hummocky	4/29/2014 11:41:36 AM	on the edge of old access road	1.0	Native Soil					Hummocky	edge of old access road				
R-4	Vegetation	Hummocky	5/2/2014 9:29:42 AM	roadside	0.5	Fill Native Soil	Trash Tires Construction Materials	Small (<2 feet)	NA	bottles, wrappers, plastic, fabric, asphalt, cans, Styrofoam, part of a utility pole	Hummocky	3 mounds				
R-5	Hummocky	Hummocky	5/2/2014 9:31:32 AM	side of road	0.5	Native Soil	Trash	Medium (2-5 feet)	NA	bottles, plastic bag, Christmas lights						
R-6	Hummocky	Hummocky	5/1/2014 3:32:24 PM	off side of road, mulch piles, stockpile of lumber	0.5	Fill					Hummocky	mulch mounds				

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 NA - Not applicable

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							Object Type	Amount	Condition	General Observations	Object Type	General Observations	Object Type	Size	Surface Type	General Observations
R-7	Hummocky	Hummocky	5/1/2014 3:15:22 PM	mulch mounds, near edge of road, lumber stockpile	1.0	Fill	Trash	Medium (2-5 feet)	NA	lightbulb, cans, bottles	Hummocky	mulch piles				
R-8	Hummocky	Hummocky	5/1/2014 3:00:11 PM	edge of driveway	1.0	Native Soil	Trash	Medium (2-5 feet)	NA	plastic bags, bottles	Hummocky	mound off side of road				
R-9	Hummocky	Flat	5/1/2014 2:41:15 PM	side of driveway	0.5	Native Soil	Trash Construction Materials	Large (>5 feet)	NA	plastic, bottles, ford hubcap, asphalt	Hummocky	gravel mound				
S-1	Vegetation	Steep	5/2/2014 10:05:53 AM	rock wall covert	1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic bag and jug, wrappers, asphalt, Styrofoam, cans						
S-10	Hummocky	Hummocky	5/2/2014 11:06:51 AM	near rock outcrop	0.5	Native Soil	Trash	Small (<2 feet)	NA	glass bottles, wrappers						
S-11	Vegetation	Flat	5/2/2014 11:14:53 AM	on top of bedrock	0.5	Native Soil	Trash	Small (<2 feet)	NA	plastic, rusty spray paint can, wrappers, glass bottles						
S-12	Rocks	Top of hill	5/2/2014 11:19:04 AM	top of bedrock	0.5	Native Soil	Trash	Medium (2-5 feet)	NA	wires, rusted wagon, piece of fence						
S-13	Vegetation	Hummocky	5/2/2014 11:24:43 AM	on top of bedrock	0.5	Native Soil	Trash	Small (<2 feet)	NA	wheel, plastic, golf ball, record	Hummocky	1 small depression				
S-14	Rocks	Top of hill	5/2/2014 11:31:11 AM	top of bedrock	0.5	Native Soil	Trash	Small (<2 feet)	NA	bottles, spray paint can, golf balls						
S-15	Vegetation	Steep	5/2/2014 11:34:12 AM	rocky: bedrock and rocky elongated mound	0.5	Native Soil	Trash Construction Materials	Small (<2 feet)	NA	fencing, plastic ball, Styrofoam	Hummocky	mound				
S-16	Hummocky	Flat	5/2/2014 11:39:11 AM	edge of bedrock outcrop	2.0	Native Soil	Trash	Medium (2-5 feet)	NA	planter, mud flap, bottles, plastic, bike wheel, misc. metal, metal spring						
S-17	Vegetation	Flat	5/1/2014 3:53:11 PM	potential old access road	NA		Trash	Small (<2 feet)	NA	rusty metal, plastic toy, glass bottles, many springs, bottles, Styrofoam, wire						
S-18	Vegetation	Flat	5/1/2014 3:22:27 PM	gentle slope	1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic, tin foil						
S-19	Rocks	Flat	5/1/2014 3:15:14 PM	asphalt driveway			Construction Materials	Medium (2-5 feet)	NA	wood debris, caution tape						
S-2	Rocks	Hummocky	5/2/2014 10:07:13 AM	edge of rock wall	0.5	Native Soil	Trash Construction Materials	Medium (2-5 feet)	NA	cans, bottles, caution tape, Styrofoam, piece of plywood	Hummocky	1 mound				
S-20	Vegetation	Top of hill	5/1/2014 3:08:44 PM	adjacent to driveway	0.5	Native Soil	Trash Construction Materials	Small (<2 feet)	NA	wrappers, bottle, wood						
S-21	Vegetation	Steep	5/1/2014 2:58:28 PM		1.0	Native Soil	Trash Construction Materials	Small (<2 feet)	NA	cans, plastic, rusty gate						
S-22	Vegetation	Steep	5/1/2014 2:41:11 PM		0.5	Native Soil	Trash Construction Materials	Medium (2-5 feet)	NA	rusty metal [possibly a bed frame and basin], cans, bottles, asphalt, wrappers, plastic, rusty fencing, concrete	Hummocky	minor mounds				
S-23	Vegetation	Steep	5/1/2014 2:32:15 PM		0.5	Native Soil	Trash	Medium (2-5 feet)	NA	hose						
S-24	Vegetation	Steep	5/1/2014 2:26:31 PM		0.5	Native Soil	Trash Tires	Small (<2 feet)	NA	wrappers, plastic						
S-25	Vegetation	Steep	5/1/2014 2:03:55 PM	rocky	1.5	Native Soil	Trash	Small (<2 feet)	NA	can, plastic and glass bottles, rusty cans, wrappers						
S-26	Vegetation	Steep	5/1/2014 1:54:01 PM		1.0	Native Soil	Tires	Medium (2-5 feet)	Empty	3 tires	Hummocky	a few small mounds				
S-27	Vegetation	Steep	5/1/2014 1:47:21 PM	gentle slope	1.5	Native Soil	Trash	Small (<2 feet)	NA	wire	Hummocky	some small mounds				
S-28	Vegetation	Steep	5/1/2014 1:29:41 PM	gentle slope	1.0	Native Soil	Trash	Small (<2 feet)	NA	rusty metal wire, glass bottle, piece of rusty metal						
S-29	Vegetation	Flat	5/1/2014 1:32:51 PM	inside goat fence [did not enter]	NA											
S-3	Vegetation	Steep	5/2/2014 10:19:17 AM	behind rock wall	0.5	Native Soil	Trash	Small (<2 feet)	NA	tarp, silt fence, can, paper bag	Hummocky	ridge mound				
S-30	Rocks	Flat	5/1/2014 1:34:15 PM	asphalt [inside fence, did not enter]	NA											
S-31	Rocks	Flat	5/1/2014 1:34:31 PM	asphalt [inside fence, we did not enter]	NA											
S-32	Rocks	Flat	5/1/2014 1:35:11 PM	asphalt, [inside fence, did not enter]	NA											
S-33	Rocks	Flat	5/1/2014 1:16:35 PM	asphalt	NA											
S-34	Rocks	Flat	5/1/2014 1:14:34 PM	small patch of vegetation between asphalt	NA											
S-35	Rocks	Flat	5/1/2014 1:12:59 PM	asphalt driveway	NA											
S-4	Rocks	Hummocky	5/2/2014 10:19:54 AM	edge of rock wall, steep	0.5	Native Soil	Trash	Small (<2 feet)	NA	Styrofoam cups, car muffler, bottles, cans, plastic bag, drainage pipe culvert	Hummocky	steep side of rock wall				
S-45	Rocks	Flat	4/29/2014 12:12:54 PM	little vegetation, rocks, flat built up surface, glacial rocks adjacent	0.5	Native Soil	Trash Tires	Small (<2 feet)	NA	gun shells, 2 tires, rusty metal debris possibly a mud flap, screen						

Notes:
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Hand augers were not advanced in some locations due to rocks/gravel, asphalt, water, debris, or thick vegetation including the presence of dense tree roots.
NA - Not applicable

Appendix A - Table 2. Node Points Summary - Level 2
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Land Type	Ground Surface Type	Date Collected	General Observations	Hand Auger Depth (feet)	General Observations	Surface Refuse				Disturbed Ground		Paint Waste			
							Object Type	Amount	Condition	General Observations	Object Type	General Observations	Object Type	Size	Surface Type	General Observations
S-46	Hummocky	Hummocky	4/29/2014 12:05:57 PM	near potential blast area, evidence of blast rock, potential open area off possible access road, difficult to core in open area	0.5	Native Soil	Trash	Small (<2 feet)	NA	car mat						
S-47	Hummocky	Hummocky	4/29/2014 11:49:20 AM	4 depressions	1.0	Native Soil										
S-5	Vegetation	Flat	5/2/2014 10:33:13 AM	lawn	1.0	Fill										
S-6	Vegetation	Flat	5/2/2014 10:37:53 AM	grass, some asphalt	NA											
S-7	Rocks	Flat	5/2/2014 10:37:42 AM	asphalt	NA											
S-8	Hummocky	Top of hill	5/2/2014 10:56:32 AM	hilly area off side of road	0.5	Native Soil	Trash	Small (<2 feet)	NA	bottles, cans, wrappers	Hummocky	rock mounds				
S-9	Vegetation	Top of hill	5/2/2014 10:57:59 AM	near road; bedrock	0.5	Native Soil	Trash	Small (<2 feet)	NA	wires, wrapper, glass bottles, bike tire						
T-1	Water	Stream	5/5/2014 9:23:54 AM	steep bank	1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic						
T-10	Asphalt	Flat	5/5/2014 10:16:29 AM	driveway	NA											
T-11	Asphalt	Flat	5/5/2014 10:17:05 AM	driveway, rock outcrop	NA											
T-12	Asphalt	Flat	5/5/2014 10:19:53 AM	building	NA		Trash	Small (<2 feet)	NA	wrappers and plastic along side of building						
T-13	Asphalt	Flat	5/5/2014 10:21:00 AM	building	NA											
T-14	Asphalt	Flat	5/5/2014 10:22:25 AM	building	NA											
T-15	Vegetation	Slope	5/5/2014 10:42:18 AM		0.5	Native Soil	Trash	Small (<2 feet)	NA	plastic bags, plastic, metal, cable	Hummocky	a few small mounds				
T-16	Vegetation	Slope	5/5/2014 10:55:34 AM		0.5	Native Soil	Trash	Small (<2 feet)	NA	glass bottle, plastic, rubber, wrapper						
T-17	Asphalt	Flat	5/5/2014 11:00:18 AM	driveway	0.5	Native Soil	Trash	Small (<2 feet)	NA	rusty metal beam [remnants of roadside sign], plastic bottles, golf ball, plastic						
T-18	Vegetation	Slope	5/5/2014 11:07:47 AM		1.0	Native Soil	Trash Tires	Small (<2 feet)	NA	plastic pipe, Styrofoam, rusty metal, Christmas lights, cans	Fill Material	rock wall adjacent to green mt tree shed				
T-19		Flat	5/5/2014 11:26:23 AM	green mountain tree shed	NA		Trash Tires	Medium (2-5 feet)	NA	roof shingles, rusty metal siding, plastic pipes, chicken wire, cans						
T-2	Vegetation	Steep	5/5/2014 9:30:18 AM		1.0	Native Soil					Hummocky	a few small mounds				
T-20		Flat	5/5/2014 11:32:22 AM	shed	NA		Trash Construction Materials	Medium (2-5 feet)	NA	ladder, cables, siding						
T-21	Asphalt	Flat	5/5/2014 11:24:10 AM	driveway	NA		Trash Construction Materials	Large (>5 feet)	NA	trash from business [see photos], signs, wood						
T-22	Asphalt	Flat	5/5/2014 11:57:06 AM	driveway	NA		Trash	Small (<2 feet)	NA	wood debris, plastic toy, old shed						
T-23	Asphalt	Flat	5/5/2014 12:06:44 PM	driveway	NA		Trash Construction Materials	Medium (2-5 feet)	NA	wood debris, siding, crane part						
T-24	Vegetation	Slope	5/5/2014 12:02:51 PM	behind car port	0.5	Native Soil	Trash Tires Construction Materials	Medium (2-5 feet)	NA	4 tires, tarps, plastic tubing, wood shed parts, fencing, kids toy, propane tank						
T-25	Vegetation	Slope	5/5/2014 12:08:32 PM		1.5	Native Soil	Trash Construction Materials Tires	Medium (2-5 feet)	NA	plastic tubing, wood debris, toy tire, cans, cement, bottles						
T-26	Vegetation	Slope	5/5/2014 2:16:09 PM		1.5	Native Soil	Trash	Small (<2 feet)	NA	bottles, plastic, cans, wrapper	Hummocky	small mounds				
T-27	Vegetation	Steep	5/5/2014 2:21:15 PM		1.5	Native Soil	Trash	Small (<2 feet)	NA	plastic, wrapper						
T-28	Vegetation	Slope	5/5/2014 2:36:01 PM		0.5	Native Soil	Trash Tires	Small (<2 feet)	NA	bottle, rusty metal tub						
T-29	Vegetation	Bottom of slope	5/5/2014 2:52:47 PM		0.5	Native Soil										
T-3	Vegetation	Steep	5/5/2014 9:39:02 AM		0.5	Native Soil	Trash	Small (<2 feet)	NA	tin foil	Hummocky	there seem to be small natural mounds				
T-30	Vegetation	Slope	5/5/2014 3:19:47 PM	inside goat fence	NA											
T-31	Vegetation	Slope	5/5/2014 3:19:21 PM	inside fence	NA											
T-32	Vegetation	Slope	5/5/2014 3:18:41 PM	inside goat fence	NA											
T-33	Asphalt	Flat	5/5/2014 3:17:32 PM	inside goat fence [we did not access]	NA											
T-34	Asphalt	Flat	5/5/2014 3:17:05 PM	inside cow barn	NA											
T-35	Asphalt	Flat	5/5/2014 3:23:01 PM	driveway	NA											
T-36	Vegetation	Flat	5/5/2014 3:25:42 PM	adjacent to driveway	1.0	Native Soil Fill	Trash Construction Materials	Medium (2-5 feet)	NA	wood debris, asphalt, plastic, concrete	Hummocky	2 mounds of driveway material				
T-37	Vegetation	Top of hill	5/5/2014 3:37:39 PM	bedrock outcrop, swampy region	1.5	Native Soil	Trash	Small (<2 feet)	NA	black hose, bottle, cinder block, metal, wood debris						
T-38	Vegetation	Top of hill	5/5/2014 3:43:24 PM	bedrock; no core recovery	NA		Trash Construction Materials	Medium (2-5 feet)	NA	road debris, cable	Hummocky	debris mounds				
T-39	Vegetation	Slope	5/5/2014 4:07:16 PM		1.0	Native Soil	Trash	Small (<2 feet)	Rusted/Pitted	rusty water pump and shroud						

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NA - Not applicable

Appendix A - Table 2. Node Points Summary - Level 2
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Land Type	Ground Surface Type	Date Collected	General Observations	Hand Auger Depth (feet)	General Observations	Surface Refuse				Disturbed Ground		Paint Waste			
							Object Type	Amount	Condition	General Observations	Object Type	General Observations	Object Type	Size	Surface Type	General Observations
T-4	Vegetation	Flat	5/5/2014 9:49:40 AM	small gouged valley adjacent to rock wall	0.5	Native Soil	Trash	Small (<2 feet)	NA	plastic, bottles, wrappers	Hummocky	a few small mounds				
T-40	Vegetation	Flat	5/5/2014 4:18:46 PM	small depressi9n	0.5	Native Soil	Trash	Medium (2-5 feet)	NA	garbage, auto parts some oil cans	Hummocky	depression				
T-41	Vegetation	Hummocky	5/5/2014 4:05:56 PM	depression and vegetation	1.0	Native Soil					Hummocky	large depression probably from old stream path				
T-42	Vegetation	Flat	5/2/2014 2:49:30 PM	gully	1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic bottle						
T-43	Hummocky	Hummocky	5/2/2014 2:49:02 PM	near bedrock outcrop	0.5	Native Soil					Hummocky	bedrock mound				
T-44	Vegetation	Flat	5/2/2014 2:37:02 PM	glacial rocks, bedrock outcrop	1.0	Native Soil										
T-45	Rocks	Hummocky	5/2/2014 2:38:13 PM	glacial rock	0.5	Native Soil										
T-46	Vegetation	Flat	5/2/2014 2:20:55 PM	gentle slope	1.0	Native Soil						adjacent to blast rock wall/built up surface				
T-5	Rocks	Flat	5/5/2014 10:00:34 AM	rock wall	0.5	Native Soil	Trash	Small (<2 feet)	NA	bottled, wrappers		rock wall				
T-6	Vegetation	Flat	5/5/2014 10:10:18 AM	lawn	NA											
T-7	Asphalt	Flat	5/5/2014 10:12:38 AM	driveway	NA											
T-8	Asphalt	Flat	5/5/2014 10:14:04 AM	driveway	NA											
T-9	Asphalt	Flat	5/5/2014 10:15:00 AM		NA											
U-1	Vegetation	Steep	5/5/2014 9:28:36 AM	slope to the stream	1.0	Native Soil										
U-10	Asphalt	Asphalt	5/5/2014 10:19:43 AM	parking lot	NA											
U-11			5/5/2014 10:20:38 AM	building	NA											
U-12			5/5/2014 10:21:33 AM	building	NA											
U-13			5/5/2014 10:22:35 AM	building	NA											
U-14	Vegetation	Flat	5/5/2014 10:39:18 AM	back of building	0.5	Native Soil										
U-15	Vegetation	Flat	5/5/2014 10:44:20 AM	wooded area	1.0		Trash	Small (<2 feet)	Empty	rusted metal						
U-16	Vegetation	Flat	5/5/2014 11:00:34 AM	sheet metal	1.0	Native Soil	Trash	Small (<2 feet)	NA	sheet metal, cans bottles						
U-17	Asphalt	Flat	5/5/2014 11:04:27 AM	asphalt driveway	NA						Asphalt					
U-18	Asphalt	Flat	5/5/2014 11:17:27 AM	asphalt	NA		Trash	Small (<2 feet)	NA	plastic						
U-19			5/5/2014 11:20:04 AM	building	NA											
U-2	Vegetation	Slope	5/5/2014 9:36:17 AM		1.0	Native Soil										
U-20		Asphalt	5/5/2014 11:21:53 AM	asphalt driveway	NA											
U-21	Asphalt	Asphalt	5/5/2014 11:24:30 AM	parking lot	NA											
U-22	Asphalt	Asphalt	5/5/2014 11:25:44 AM	parking lot with wood piles	NA											
U-23	Asphalt	Flat	5/5/2014 11:28:57 AM	chopped wood pile	NA											
U-24	Vegetation	Flat	5/5/2014 11:37:02 AM	wood pile on asphalt parking lot	NA						Fill Material	wood pile				
U-25	Vegetation	Flat	5/5/2014 11:43:11 AM	extra wood chips piles	2.0	Fill Debris					Fill Material	wood chips				
U-26	Hummocky	Hummocky	5/5/2014 11:53:06 AM	wood fill	2.0	Fill Debris					Fill Material	wood chip stockpile				
U-27	Hummocky	Slope	5/5/2014 11:58:44 AM	back end of wood pile	0.5	Fill Debris					Fill Material	wood pile fill				
U-28	Marshy	Flat	5/5/2014 1:56:29 PM	marshy and rocky	0.5	Native Soil										
U-29	Marshy	Stream	5/5/2014 2:06:26 PM	marshy wetland.	1.0	Native Soil										
U-3	Vegetation	Hummocky	5/5/2014 9:37:17 AM	some small mounds and depression	1.0	Native Soil	Trash	Small (<2 feet)	NA	bottle, wrappers, electrical tape	Hummocky	long mounds				
U-30	Marshy	Flat	5/5/2014 2:12:17 PM	edge of beaver pond marsh	1.0	Native Soil										
U-31	Marshy	Flat	5/5/2014 2:23:15 PM	edge of beaver pond	1.5	Native Soil										
U-32	Marshy	Hummocky	5/5/2014 2:26:08 PM	edge of beaver pond	1.0	Native Soil										
U-33	Marshy	Hummocky	5/5/2014 2:31:25 PM	marshy edge of beaver pond	1.0	Native Soil										
U-34					1.0	Native Soil										
U-35	Marshy	Hummocky	5/5/2014 2:33:59 PM	edge of beaver pond. downed trees	1.0	Native Soil										
U-36	Marshy	Hummocky	5/5/2014 2:37:22 PM	edge of beaver ponds	1.5	Native Soil										
U-37	Rocks	Mound	5/5/2014 2:43:00 PM	SMALL BEDROCK PILE	0.5	Native Soil										
U-38	Rocks	Mound	5/5/2014 2:46:14 PM	small bedrock pile	0.5	Native Soil					Hummocky	mound and depression				
U-39	Vegetation	Flat	5/5/2014 3:06:22 PM		0.5	Native Soil					Hummocky	great depression				
U-4	Vegetation	Hummocky	5/5/2014 9:55:04 AM	next to retaining wall	1.0	Native Soil	Trash	Small (<2 feet)	NA	wrappers and bottles	Hummocky	small mounds and depression				
U-40	Vegetation	Flat	5/5/2014 3:11:04 PM	rocks and trees with depressions	0.5	Native Soil					Hummocky	large elongate depression possibly from old stream path				
U-41	Vegetation	Flat	5/5/2014 3:14:00 PM	rocks and vegetation	1.0	Native Soil	Trash	Small (<2 feet)	NA	motor oil bottle						

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NA - Not applicable

Appendix A - Table 2. Node Points Summary - Level 2
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Land Type	Ground Surface Type	Date Collected	General Observations	Hand Auger Depth (feet)	General Observations	Surface Refuse				Disturbed Ground		Paint Waste			
							Object Type	Amount	Condition	General Observations	Object Type	General Observations	Object Type	Size	Surface Type	General Observations
U-42	Rocks	Flat	5/5/2014 3:30:30 PM	boulder field	0.5	Native Soil										
U-43	Rocks	Crevice	5/5/2014 3:40:01 PM	boulder field	0.5	Native Soil										
U-44	Rocks	Flat	5/5/2014 3:44:16 PM	boulder field near stream	0.5	Native Soil										
U-5	Vegetation	Flat	5/5/2014 10:10:35 AM	grass	0.5	Native Soil					Fill Material	grass lawn and retaining wall				
U-6	Rocks	Asphalt	5/5/2014 10:14:36 AM	retaining wall separating grass and asphalt	NA											
U-7	Asphalt	Asphalt	5/5/2014 10:17:03 AM	parking lot	NA											
U-8	Asphalt	Asphalt	5/5/2014 10:17:35 AM	parking lot	NA											
U-9	Asphalt	Asphalt	5/5/2014 10:17:58 AM	parking lot	NA											
V-1	Rocks	Slope	5/6/2014 9:25:38 AM	slope to stream. rocks along slope	1.5	Native Soil	Trash	Small (<2 feet)	NA	confetti						
V-10	Asphalt	Flat	5/6/2014 10:06:13 AM	building	NA											
V-11	Asphalt	Flat	5/6/2014 10:06:53 AM	building	NA											
V-12	Asphalt	Flat	5/6/2014 10:07:12 AM	building	NA											
V-13	Vegetation	Flat	5/6/2014 10:26:55 AM	grass against building	NA											
V-14	Vegetation	Flat	5/6/2014 10:28:06 AM	wooded area between lots	1.0	Native Soil	Trash	Small (<2 feet)	NA	cinder blocks, bottles plastic	Hummocky	mounds and depression				
V-15	Vegetation	Flat	5/6/2014 10:38:00 AM	wooded area next to wood pile	1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic, garbage bottles						
V-16	Vegetation	Flat	5/6/2014 10:57:02 AM	wood pile	NA											
V-17	Vegetation	Flat	5/6/2014 10:58:46 AM	asphalt road with wood piles	NA											
V-18	Asphalt	Flat	5/6/2014 11:00:26 AM	parking lot	NA											
V-19	Asphalt	Flat	5/6/2014 11:01:57 AM	parking lot	NA											
V-2	Rocks	Slope	5/6/2014 9:34:41 AM	slope into stream	0.5	Native Soil	Trash	Small (<2 feet)	NA	glass bottle						
V-20	Vegetation	Flat	5/6/2014 11:03:57 AM	wood storage lot/ parking lot	0.5	Native Soil										
V-21	Vegetation	Flat	5/6/2014 11:07:00 AM	wood storage lot	NA											
V-22	Vegetation	Flat	5/6/2014 11:10:53 AM	wood storage lot	NA											
V-23	Vegetation	Flat	5/6/2014 11:14:17 AM	wood storage lot/ human feces	NA											
V-24	Vegetation	Flat	5/6/2014 11:18:48 AM	wood storage lot	NA											
V-25	Vegetation	Slope	5/6/2014 11:21:39 AM	backside of wood pile	2.0	Fill	Trash	Small (<2 feet)	NA	plastic containers	Fill Material	wood pile fill				
V-26	Vegetation	Slope	5/6/2014 1:31:57 PM	backside of wood pile	1.0	Fill Debris	Trash Construction Materials	Small (<2 feet)	NA	asphalt, garbage, small pieces of metal						
V-27	Vegetation	Slope	5/6/2014 1:35:45 PM	backside of woodpile slope/ edge of beaver pond	1.0	Native Soil Fill	Trash			plastic garbage bag						
V-28	Marshy	Flat	5/6/2014 1:43:41 PM	edge of beaver pond	1.5	Native Soil										
V-29	Marshy	Flat	5/6/2014 1:49:27 PM	marshland at edge of beaver pond	2.0	Native Soil										
V-3	Vegetation	Slope	5/6/2014 9:39:15 AM	vegetation, bottles	1.5	Native Soil	Trash	Small (<2 feet)	NA	glass bottles, confetti, plastic bottles						
V-30	Marshy	Flat	5/6/2014 1:51:25 PM	marshy edge of beaver pond	2.0	Native Soil										
V-31	Marshy	Flat	5/6/2014 1:53:28 PM	edge of beaver pond	2.0	Native Soil										
V-32	Water	Flat	5/6/2014 2:00:52 PM	beaver pond	NA											
V-33	Water		5/6/2014 2:02:03 PM	beaver pond	NA											
V-34	Water	Flat	5/6/2014 2:02:22 PM	beaver pond	NA											
V-35	Marshy	Flat	5/6/2014 2:03:30 PM	edge of beaver pond. less fragmites more wooded	1.0	Native Soil										
V-36	Vegetation	Flat	5/6/2014 2:08:22 PM	wooded area	1.0	Native Soil					Hummocky	small pond				
V-37	Vegetation	Flat	5/6/2014 2:12:18 PM	next to a pond	1.0	Native Soil					Hummocky	pond				
V-38	Vegetation	Flat	5/6/2014 2:15:51 PM	wooded area next to stream	NA											
V-39	Vegetation	Flat	5/6/2014 2:18:20 PM	wooded area native forest	0.5	Native Soil	Trash	Small (<2 feet)	NA	bubble wrap						
V-4	Vegetation	Slope	5/6/2014 9:50:37 AM	vegetation leading up to retaining wall	1.0	Native Soil	Trash	Small (<2 feet)	NA	bottles, plastic confetti, bags						
V-40	Vegetation	Flat	5/6/2014 2:22:51 PM	wooded area next to stream	1.0	Native Soil										
V-41	Vegetation	Flat	5/6/2014 2:25:47 PM	wooded native forest	1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic wrappers						
V-5	Vegetation	Flat	5/6/2014 9:58:51 AM	grass and retaining wall	NA											
V-6	Asphalt	Flat	5/6/2014 10:00:08 AM	parking lot	NA											

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NA - Not applicable

Appendix A - Table 2. Node Points Summary - Level 2
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Land Type	Ground Surface Type	Date Collected	General Observations	Hand Auger Depth (feet)	General Observations	Surface Refuse				Disturbed Ground		Paint Waste			
							Object Type	Amount	Condition	General Observations	Object Type	General Observations	Object Type	Size	Surface Type	General Observations
V-7	Asphalt	Asphalt	5/6/2014 10:01:25 AM	parking lot	NA											
V-8	Asphalt	Asphalt	5/6/2014 10:02:54 AM	parking lot	NA											
V-9	Asphalt	Asphalt	5/6/2014 10:05:24 AM	parking lot	NA											
W-1	Water	Stream	5/7/2014 9:40:44 AM		1.0	Native Soil	Trash	Small (<2 feet)	NA	Mylar confetti, plastic bottles, glass, rusty metal piece						
W-10		Flat	5/6/2014 4:02:31 PM	building	NA											
W-11		Flat	5/6/2014 4:02:17 PM	building	NA											
W-12	Vegetation	Flat	5/6/2014 3:50:37 PM	lawn; near rock wall	NA											
W-13	Vegetation	Slope	5/6/2014 3:37:20 PM	rock wall adjacent	1.0	Native Soil	Trash	Small (<2 feet)	NA	rusty metal, plastic bag, plastic cup, door knob						
W-14	Vegetation	Slope	5/6/2014 3:17:55 PM		1.0	Native Soil	Trash	Small (<2 feet)	NA	bottles		1 depression				
W-15	Vegetation	Bottom of slope	5/6/2014 3:05:55 PM		1.0	Native Soil	Trash	Small (<2 feet)	NA	cans, bottles, planting pot		possible old access road				
W-16	Vegetation	Flat	5/6/2014 2:59:03 PM	adjacent to wood pile	0.5	Native Soil	Trash Construction Materials	Small (<2 feet)	NA	fabric, plastic, bucket, wood debris, bottles						
W-17	Vegetation	Flat	5/6/2014 2:53:30 PM	wood debris mound	0.5	Native Soil Fill				wood pile						
W-18	Asphalt	Flat	5/6/2014 2:51:48 PM	wood debris mound and dirt driveway	NA											
W-19	Asphalt	Flat	5/6/2014 2:48:50 PM	wood debris mound and dirt driveway	NA											
W-2	Vegetation	Slope	5/7/2014 9:25:29 AM		1.0	Native Soil	Trash	Small (<2 feet)	NA	Mylar pieces						
W-20	Asphalt	Flat	5/6/2014 2:47:26 PM	dirt driveway and wood debris mound												
W-21	Asphalt	Flat	5/6/2014 2:43:22 PM	dirt driveway												
W-22	Vegetation	Flat	5/6/2014 2:38:50 PM	adjacent to mulch pile	0.5	Fill	Construction Materials	Medium (2-5 feet)	NA	mulch and wood debris						
W-23	Vegetation	Top of hill	5/6/2014 2:29:46 PM	wood pile	0.5	Fill Native Soil	Trash Construction Materials	Medium (2-5 feet)	NA	glass, cans, rusty metal debris, plastic, fabric, caution tape, Styrofoam, wood debris, parts of an old shed, roof tiles						
W-24	Vegetation	Slope	5/6/2014 2:16:15 PM		1.0	Native Soil	Trash	Small (<2 feet)	NA	Christmas tree lights, wood debris, cans, trophy						
W-25	Vegetation	Slope	5/6/2014 2:08:01 PM		0.5	Native Soil	Construction Materials	Small (<2 feet)	NA	construction cone, bottle						
W-26	Marshy	Flat	5/6/2014 1:58:12 PM	pond	0.5	Native Soil										
W-27	Marshy	Flat	5/6/2014 1:49:37 PM	pond	1.5	Native Soil										
W-28	Marshy	Flat	5/6/2014 1:41:51 PM		1.5	Native Soil										
W-29	Marshy	Flat	5/6/2014 1:35:30 PM	beaver pond	1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic						
W-3	Vegetation	Slope	5/7/2014 9:12:10 AM	adjacent to rock wall	0.5	Native Soil	Trash	Small (<2 feet)	NA	plastic bottles, Mylar confetti, Styrofoam, glass						
W-4	Vegetation	Flat	5/7/2014 9:03:00 AM	lawn with rock wall on each side	NA		Trash	Small (<2 feet)	NA	Mylar pieces						
W-5	Rocks	Flat	5/7/2014 8:59:57 AM	rock wall along driveway	NA	Fill										
W-6	Asphalt	Flat	5/7/2014 8:58:18 AM	driveway	NA											
W-7	Asphalt	Flat	5/7/2014 8:57:10 AM	driveway	NA											
W-8	Asphalt	Flat	5/7/2014 8:56:51 AM	driveway	NA											
W-9	Asphalt	Flat	5/6/2014 4:11:29 PM	building	NA											
X-1	Vegetation	Slope	5/7/2014 9:24:38 AM	bank of stream	1.0	Native Soil										
X-10	Vegetation	Flat	5/7/2014 9:00:19 AM	grass	1.0	Native Soil										
X-11	Vegetation	Flat	5/7/2014 8:58:56 AM	grass	1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic bags						
X-12	Vegetation	Slope	5/6/2014 4:10:14 PM	wooded area and grass separated by a retaining wall	1.0	Native Soil	Trash	Small (<2 feet)	NA	wheel barrow, plastic cups, plastic bags						
X-13	Vegetation	Slope	5/6/2014 4:02:11 PM	wooded area, retaining wall,	1.0	Native Soil	Trash	Small (<2 feet)	NA	Styrofoam, confetti						
X-14	Vegetation	Flat	5/6/2014 3:52:01 PM	wooded area	NA		Trash			plastic, bottles, cans						
X-15	Vegetation	Slope	5/6/2014 3:40:41 PM	wooded area	1.0	Native Soil										
X-16	Vegetation	Flat	5/6/2014 3:28:35 PM	wooded	NA						Hummocky	mound and depression				
X-17																
X-18	Vegetation	Flat	5/6/2014 3:17:46 PM	wood storage lot	NA											
X-19	Vegetation	Mound	5/6/2014 3:14:43 PM	woodchip mound	NA						Hummocky	woodchip mound				
X-2	Vegetation	Slope	5/7/2014 9:20:34 AM	slope to stream	1.0	Native Soil	Trash	Small (<2 feet)		confetti, package peanuts						
X-20	Vegetation	Mound	5/6/2014 3:08:09 PM	wood storage lot	2.0	Fill					Hummocky	wood chip mound				
X-21	Vegetation	Mound	5/6/2014 3:04:33 PM	woodchip pile	2.0	Fill	Trash			misc. trash	Fill Material	woodchip pile				

Notes:
Letter listed in identifier is survey node line
(i.e., "B-3" was collected from line B)
Hand augers were not advanced in some locations due to rocks/gravel, asphalt, water, debris, or thick vegetation including the presence of dense tree roots.
NA - Not applicable

Appendix A - Table 2. Node Points Summary - Level 2
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Land Type	Ground Surface Type	Date Collected	General Observations	Hand Auger Depth (feet)	General Observations	Surface Refuse				Disturbed Ground		Paint Waste			
							Object Type	Amount	Condition	General Observations	Object Type	General Observations	Object Type	Size	Surface Type	General Observations
X-22	Vegetation	Steep	5/6/2014 3:01:56 PM	too much vegetation and thorns to scale steep hill. can visually ID some garbage	2.0	Fill Debris	Trash			plant pots, plastic						
X-23	Marshy	Flat	5/6/2014 2:48:32 PM	edge of hill and marsh	1.0	Native Soil										
X-24	Marshy	Flat	5/6/2014 2:46:28 PM	edge of beaver pond	1.0	Native Soil										
X-3	Vegetation	Slope	5/7/2014 9:16:43 AM	edge of retaining wall and slope to river	1.5	Native Soil	Trash	Small (<2 feet)	NA	confetti	Hummocky	depression				
X-4	Vegetation	Flat	5/7/2014 9:09:42 AM	grass and retaining wall	NA		Trash	Small (<2 feet)		golf ball						
X-5	Asphalt	Flat	5/7/2014 9:07:20 AM	edge of parking lot	NA		Trash	Small (<2 feet)	NA	pillow, Styrofoam						
X-6	Asphalt		5/7/2014 9:06:29 AM	parking lot	NA											
X-7	Asphalt		5/7/2014 9:05:14 AM	parking lot	NA											
X-8	Asphalt	Flat	5/7/2014 9:04:01 AM	corner of building	NA											
X-9			5/7/2014 9:01:56 AM	blocked by shipping containers	NA											
Y-1	Vegetation	Flat	5/7/2014 9:37:09 AM	bank of stream	1.0	Native Soil	Trash			confetti	Hummocky	bank				
Y-10	Vegetation	Flat	5/7/2014 10:41:58 AM	edge of building lot grass area/ wooded area	1.0	Native Soil	Trash	Small (<2 feet)	NA	confetti	Hummocky					
Y-11	Vegetation	Slope	5/7/2014 10:49:37 AM	wooded area	0.5	Native Soil					Hummocky	small depression				
Y-12	Vegetation	Slope	5/7/2014 10:54:28 AM	wooded area	1.0	Native Soil										
Y-13	Vegetation	Slope	5/7/2014 11:01:23 AM	wooded area	1.0	Native Soil										
Y-14	Vegetation	Flat	5/7/2014 11:04:18 AM	wooded area	1.0	Native Soil	Trash	Small (<2 feet)	NA	candy wrappers						
Y-15	Vegetation	Slope	5/7/2014 11:09:45 AM	wooded area	2.0	Native Soil	Trash	Small (<2 feet)	NA	plastic wrappers						
Y-16	Vegetation	Slope	5/7/2014 11:19:45 AM	wooded area next to wood chip pile	1.0	Native Soil	Trash	Small (<2 feet)	NA	cans, wood debris						
Y-17	Vegetation	Slope	5/7/2014 11:26:54 AM	back of woodpile garbage dumping area	2.0	Native Soil	Construction Materials Trash	Large (>5 feet)	NA	large amounts of garbage, rusted metal, asphalt, cinder block, stove, washing machine, automotive trash, aluminum siding						
Y-18	Vegetation	Slope	5/7/2014 11:33:14 AM	backside of woodchip pile	2.0	Native Soil	Trash Construction Materials	Large (>5 feet)	NA	large amount of trash dumped. rusted metal, plastic, gutters						
Y-19	Vegetation	Slope	5/7/2014 11:38:22 AM	trash dumping behind wood pile	1.5	Native Soil	Trash Construction Materials	Large (>5 feet)	NA	plastic bottles, metal gutter drains, rusted metal						
Y-2	Vegetation	Slope	5/7/2014 9:41:30 AM	slope to stream bank	1.0	Native Soil	Trash	Small (<2 feet)	NA	Styrofoam						
Y-20	Vegetation	Slope	5/7/2014 11:42:02 AM	large thorn bush blocking path.	1.5	Native Soil										
Y-21	Marshy	Hummocky	5/7/2014 11:44:57 AM	marshy edge of beaver pond	2.0	Native Soil										
Y-3	Vegetation	Flat	5/7/2014 9:44:53 AM	slope next to retaining wall	1.0	Native Soil	Trash	Medium (2-5 feet)	NA	plastic, Styrofoam, general trash						
Y-4	Vegetation	Slope	5/7/2014 10:02:00 AM	dumping location for household garbage	1.0	Native Soil	Trash	Large (>5 feet)	NA	household garbage dumping area						
Y-5	Vegetation	Slope	5/7/2014 10:12:16 AM	slope against retaining wall	NA		Trash Tires	Large (>5 feet)	NA	household garbage dumping area						
Y-6	Vegetation	Slope	5/7/2014 10:19:07 AM	edge of parking lot	1.0	Fill Native Soil	Trash	Large (>5 feet)	NA	household garbage dumping area						
Y-7	Vegetation	Slope	5/7/2014 10:26:53 AM	edge of parking lot	1.0	Native Soil	Trash	Small (<2 feet)	NA	Styrofoam plastic, tires, plywood						
Y-8	Vegetation	Slope	5/7/2014 10:29:41 AM	edge of grassy area	1.0		Trash	Small (<2 feet)	NA	asphalt chunks						
Y-9	Vegetation	Slope	5/7/2014 10:33:22 AM	edge of grass and wooded area	1.0	Native Soil	Trash	Small (<2 feet)	NA	confetti, packing peanuts						
Z-1	Vegetation	Bottom of slope	5/7/2014 10:48:15 AM	stream bank	1.5	Native Soil	Trash	Small (<2 feet)	NA	plastic bag						
Z-10	Vegetation	Slope	5/7/2014 2:52:40 PM		0.5	Native Soil	Trash	Small (<2 feet)	NA	Styrofoam						
Z-11	Vegetation	Slope	5/7/2014 3:15:08 PM		0.5	Native Soil	Trash	Small (<2 feet)	NA	plastic bag,						
Z-12	Vegetation	Bottom of slope	5/7/2014 3:25:56 PM		1.5	Native Soil										
Z-13	Vegetation	Bottom of slope	5/7/2014 3:32:43 PM		1.5	Native Soil										
Z-2	Vegetation	Slope	5/7/2014 10:48:54 AM	steep river bank	0.5	Native Soil	Trash	Small (<2 feet)	NA	plastic bottles, lids, wrappers, cardboard						
Z-3	Vegetation	Slope	5/7/2014 11:09:18 AM		1.0	Native Soil	Trash	Small (<2 feet)	NA	cardboard, plastic, Styrofoam, wrappers						
Z-4	Vegetation	Slope	5/7/2014 11:20:59 AM		0.5	Native Soil	Trash	Small (<2 feet)	NA	Styrofoam, plastic bottle, tin foil	Hummocky	mound and depression				
Z-5	Vegetation	Slope	5/7/2014 11:35:57 AM		0.5	Native Soil	Trash	Small (<2 feet)	NA	plastic bags and bottles, Styrofoam, saran wrap, plastic cups, wrappers						

Notes:
Letter listed in identifier is survey node line
(i.e., "B-3" was collected from line B)
Hand augers were not advanced in some locations due to rocks/gravel, asphalt, water, debris, or thick vegetation including the presence of dense tree roots.
NA - Not applicable

Appendix A - Table 2. Node Points Summary - Level 2
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	Land Type	Ground Surface Type	Date Collected	General Observations	Hand Auger Depth (feet)	General Observations	Surface Refuse				Disturbed Ground		Paint Waste			
							Object Type	Amount	Condition	General Observations	Object Type	General Observations	Object Type	Size	Surface Type	General Observations
Z-6	Vegetation	Flat	5/7/2014 1:40:34 PM	edge of septic field/rock wall	0.5	Native Soil	Trash Tires	Small (<2 feet)	NA	cardboard, plastic, bottles, 5 tires, Styrofoam		possible path or access road				
Z-7	Vegetation	Flat	5/7/2014 2:02:33 PM	septic field	1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic, cups, bags, cans						
Z-8	Vegetation	Top of hill	5/7/2014 2:20:56 PM		1.0	Native Soil	Trash	Small (<2 feet)	NA	plastic bag, container						
Z-9	Vegetation	Slope	5/7/2014 2:31:23 PM		0.5	Native Soil	Trash	Small (<2 feet)	NA	wrapper, plastic						

Notes:
Letter listed in identifier is survey node line
(i.e., "B-3" was collected from line B)
Hand augers were not advanced in some locations due to rocks/gravel, asphalt, water, debris, or thick vegetation including the presence of dense tree roots.
NA - Not applicable

Appendix A - Table 3. Paint Waste Summary - Level 1
Field Reconnaissance Survey Data
Ringwood Mines/Landfill Site
Ringwood, New Jersey

Identifier	General							Hand Auger		
	Date Collected	Object Type	Size	Surface Type	Land Type	Ground Surface Type	General Observations	Completed?	Depth (feet)	Observations
E-1-2-1	4/10/2014 1:38:29 PM	Piece	<3" in diameter	Surficial	Hummocky	Hummocky		Yes	1.0	Fill Native Soil
E-1-3-1	4/10/2014 1:42:04 PM	Piece	<3" in diameter	Surficial	Hummocky	Hummocky		Yes	1.0	Native Soil Fill
E-1-4-1	4/10/2014 3:43:30 PM	Piece	<3" in diameter	Surficial	Hummocky	Flat		Yes	1.0	Fill Native Soil
E-1-5-1	4/10/2014 3:46:14 PM	Piece	<3" in diameter	Surficial	Vegetation	Flat		Yes	1.0	Native Soil Fill
E-2-2-1	4/10/2014 3:41:41 PM	Piece	<3" in diameter	Surficial	Hummocky	Hummocky	dried paint waste	No	NA	
E-2-4-1	4/10/2014 3:45:04 PM	Piece	<3" in diameter	Surficial	Marshy	Hummocky		No	NA	
E-2-5-1	4/10/2014 3:46:14 PM	Piece	<3" in diameter	Surficial	Hummocky	Hummocky		No	NA	
E-2-7-1	4/11/2014 11:50:50 AM	Piece	<3" in diameter	Surficial	Vegetation	Hummocky		No	NA	
E-2-8-1	4/11/2014 12:18:37 PM	Piece	<3" in diameter	Surficial	Hummocky	Hummocky		No	NA	
G-1-6-1	4/11/2014 10:00:04 AM	Piece	<3" in diameter	Surficial	Water	Flat	edge of brook	Yes	0.5	Native Soil

Notes:

A hand auger was not able to be advanced at some locations due to rocks, gravel, and refuse within the hummocky mounds.

NA - Not applicable

**Appendix A - Table 4. Surface Refuse Summary-Level 1
Field Reconnaissance Survey Data
Ringwood Mines Landfill Site
Ringwood, New Jersey**

Identifier	General							Hand Auger		
	Date Collected	Object Type	General Observations	Amount	Condition	Land Type	Ground Surface Type	Completed?	Depth (feet)	Observations
A-1-150-1	4/28/2014 9:22:05 AM	Trash	trash- bottles, bags, cheese containers	Medium (2-5 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
A-1-151-1	4/28/2014 9:30:05 AM	Trash	Styrofoam, cheese container, plastic bags	Medium (2-5 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
A-1-152-1	4/28/2014 9:34:02 AM	Trash	silt fence, cups, random plastic debris	Medium (2-5 feet)	NA	Vegetation	Depression	Yes	1.0	Native Soil
A-1-153-1	4/28/2014 9:43:48 AM	Trash Construction Materials	seep	Medium (2-5 feet)	NA	Vegetation	Stream	Yes	1.0	Native Soil
A-1-154-1	4/28/2014 9:50:56 AM	Construction Materials Trash	silt fence, cheese containers	Medium (2-5 feet)	NA	Marshy		Yes	1.0	Native Soil
A-1-155-1	4/28/2014 9:54:01 AM	Trash Construction Materials	base of hill, plastic bags, wrappers	Medium (2-5 feet)	NA	Rocks	Steep	Yes	1.0	Native Soil
A-1-156-1	4/28/2014 9:59:51 AM	Trash	wrappers, plastic bottles	Small (<2 feet)	NA	Vegetation	Steep	Yes	1.0	Native Soil
A-1-157-1	4/28/2014 10:22:13 AM	Trash Construction Materials	hill / edge of tree line	Medium (2-5 feet)	NA	Vegetation	Steep	Yes	1.0	Native Soil
A-1-158-1	4/28/2014 10:31:21 AM	Trash	edge of rock culvert / bottles and debris	Small (<2 feet)	NA	Vegetation	Top of hill	Yes	0.5	Native Soil
A-1-159-1	4/28/2014 10:43:16 AM	Trash	bank of stream; bottle	Small (<2 feet)	NA	Rocks	Flat	Yes	0.5	Native Soil
A-1-161-1	4/28/2014 1:00:19 PM	Trash	base of slope/ plastic / bottles	Small (<2 feet)	NA	Vegetation	Steep	Yes	1.0	Native Soil
A-2-153-1	4/28/2014 9:16:05 AM	Trash	caulk cans, cheese canisters Styrofoam	Small (<2 feet)	NA	Vegetation	Flat	Yes	1.0	Native Soil
A-2-154-1	4/28/2014 9:23:52 AM	Trash	cheese cans and metal cans	Small (<2 feet)	NA	Vegetation	Stream	Yes	1.0	Native Soil
A-2-155-1	4/28/2014 9:27:30 AM	Trash Construction Materials	tarps and cans	Medium (2-5 feet)	NA	Vegetation	Flat	No		
A-2-156-1	4/28/2014 9:55:00 AM	Trash Construction Materials	cinderblocks, asphalt, bricks	Small (<2 feet)	NA	Vegetation	Flat	Yes	1.0	Native Soil
A-2-157-1	4/28/2014 10:06:07 AM	Trash Construction Materials Tires	wood, concrete, tires, rusted metal	Small (<2 feet)	NA	Vegetation	Steep	No		
A-2-158-1	4/28/2014 10:34:24 AM	Trash Construction Materials	aerosol can, bottle, plywood	Small (<2 feet)	NA	Vegetation	Flat	No		
A-2-159-1	4/28/2014 10:36:35 AM	Construction Materials	Styrofoam insulation, 4x4 plastic	Medium (2-5 feet)	NA	Vegetation	Flat	Yes	1.5	Native Soil
A-2-161-1	4/28/2014 10:52:31 AM	Construction Materials Trash	cans, tarp	Medium (2-5 feet)	NA	Vegetation	Flat	No		
A-2-162-1	4/28/2014 11:00:38 AM	Trash	for sale sign	Small (<2 feet)	NA	Vegetation	Flat	No		
A-3-150-1	4/28/2014 9:15:12 AM	Trash	view towards lot W	Medium (2-5 feet)	NA	Hummocky	Hummocky	No		
A-3-151-1	4/28/2014 9:17:50 AM	Trash	mozzarella tubs, plastic containers	Small (<2 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil
A-3-152-1	4/28/2014 9:21:11 AM	Trash Liquid Containers Drums	lavender oil drum, empty plastic tub	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
A-3-153-1	4/28/2014 9:26:16 AM	Trash	mozzarella tubs, coffee cup, plastic bag	Medium (2-5 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil

Notes:

Letter listed in identifier is lot of origin
(i.e. "B-1-205-1" was collected from Lot B)

Hand augers were not advanced in some locations due to rocks/gravel, asphalt, water, debris, or thick vegetation including the presence of dense tree roots.

NA - Not applicable

**Appendix A - Table 4. Surface Refuse Summary-Level 1
Field Reconnaissance Survey Data
Ringwood Mines Landfill Site
Ringwood, New Jersey**

Identifier	General							Hand Auger		
	Date Collected	Object Type	General Observations	Amount	Condition	Land Type	Ground Surface Type	Completed?	Depth (feet)	Observations
A-3-154-1	4/28/2014 9:32:34 AM	Trash	mozzarella tubs and plastic soda container	Small (<2 feet)	NA	Hummocky	Hummocky	Yes	1.0	Native Soil
A-3-155-1	4/28/2014 9:36:15 AM	Trash	terminal and pest control box	Small (<2 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil
A-3-156-1	4/28/2014 9:43:30 AM	Trash	empty plastic mozzarella tubs	Large (>5 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
A-3-157-1	4/28/2014 9:49:18 AM	Trash	trash bag and plastic	Medium (2-5 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil
A-3-158-1	4/28/2014 9:54:29 AM	Trash	saran wrap and trash	Large (>5 feet)	NA	Hummocky	Steep	Yes	0.5	Native Soil
A-3-159-1	4/28/2014 9:57:40 AM	Trash	trash	Medium (2-5 feet)	NA	Hummocky	Steep	Yes	0.5	Native Soil
A-3-159-2	4/28/2014 9:51:41 AM	Trash	plastic cheese and pesto containers, bags	Small (<2 feet)	NA	Vegetation	Flat	Yes	1.5	Native Soil
A-3-160-1	4/28/2014 9:22:31 AM	Trash	trash bags, cheese containers, Styrofoam, cans	Small (<2 feet)	NA	Vegetation	Flat	Yes	1.0	Native Soil
A-3-160-2	4/28/2014 9:59:09 AM	Trash	plastic bags	Small (<2 feet)	NA	Hummocky	Steep	Yes	0.5	Native Soil
A-3-161-1	4/28/2014 9:35:32 AM	Trash	plastic cheese/food containers, glass, cans	Small (<2 feet)	NA	Vegetation	Flat	Yes	1.0	Native Soil
A-3-161-2	4/28/2014 10:19:16 AM	Tires	tire on rocks in stream	Small (<2 feet)	Rusted/Pitted	Water	Stream	No		
A-3-162-1	4/28/2014 9:40:21 AM	Trash	cheese tubs and containers, cans, plastic, Styrofoam buried in the soil	Small (<2 feet)	NA	Vegetation	Depression	Yes	1.0	Native Soil
A-3-162-2	4/28/2014 10:23:28 AM	Trash	plastic drink cup	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
A-3-163-1	4/28/2014 10:32:03 AM	Trash	mulch bag	Small (<2 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil
A-3-163-2	4/28/2014 9:51:45 AM	Trash	plastic containers, plastic, saran wrap	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
A-3-164-1	4/28/2014 10:43:03 AM	Trash	plastic	Small (<2 feet)	NA	Rocks	Hummocky	NA		
A-3-164-2	4/28/2014 9:56:13 AM	Trash	Plastic	Small (<2 feet)	NA	Vegetation	Flat	Yes	1.0	Native Soil
A-3-165-1	4/28/2014 10:04:55 AM	Trash	plastic containers, bags	Small (<2 feet)	NA	Vegetation	Depression	Yes	1.0	Native Soil
A-3-166-1	4/28/2014 10:10:47 AM	Trash	plastic containers, saran wrap	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
A-3-167-1	4/28/2014 10:17:20 AM	Trash	plastic, Styrofoam, paper	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
A-3-168-1	4/28/2014 10:21:12 AM	Trash	plastic containers and debris	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
A-3-169-1	4/28/2014 10:26:11 AM	Trash	plastic containers and bags, small battery	Small (<2 feet)	NA	Vegetation	Top of hill	Yes	0.5	Native Soil
A-3-170-1	4/28/2014 10:30:03 AM	Trash	plastic chair, bottles, cans, cinder block, wood stands from driveway, part of a fence	Small (<2 feet)	NA	Vegetation	Crevice	Yes	0.5	Native Soil
A-3-171-1	4/28/2014 10:41:05 AM	Trash Tires Construction Materials	plastic, wood planks, Styrofoam	Medium (2-5 feet)		Rocks	Flat	Yes	0.5	Native Soil Fill

Notes:

Letter listed in identifier is lot of origin
(i.e. "B-1-205-1" was collected from Lot B)

Hand augers were not advanced in some locations due to rocks/gravel, asphalt, water, debris, or thick vegetation including the presence of dense tree roots.

NA - Not applicable

**Appendix A - Table 4. Surface Refuse Summary-Level 1
Field Reconnaissance Survey Data
Ringwood Mines Landfill Site
Ringwood, New Jersey**

Identifier	General							Hand Auger		
	Date Collected	Object Type	General Observations	Amount	Condition	Land Type	Ground Surface Type	Completed?	Depth (feet)	Observations
A-3-172-1	4/28/2014 10:45:35 AM	Trash	wooden structure, sofa stuffing, tarps, wooden planks and crates, cans	Large (>5 feet)	NA	Rocks	Flat	No		
AA-1-107-1	4/25/2014 9:56:04 AM	Construction Materials	pieces of asphalt, construction debris, piece of a tarp	Medium (2-5 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil
B-1-110-1	4/23/2014 3:26:26 PM	Trash		Small (<2 feet)	NA	Vegetation	Top of hill	Yes	0.5	Native Soil
B-1-111-1	4/23/2014 3:37:45 PM	Trash		Small (<2 feet)	NA	Vegetation	Hummocky	Yes	0.5	Native Soil
B-1-112-1	4/23/2014 3:55:01 PM	Trash	bottle	Small (<2 feet)	NA	Vegetation	Steep	Yes	0.5	Native Soil
B-1-113-1	4/23/2014 3:59:56 PM	Tires	brook channel	Medium (2-5 feet)	NA	Marshy	Stream	Yes	0.5	Native Soil Debris
B-1-114-1	4/23/2014 4:03:47 PM	Trash Construction Materials	brook channel	Medium (2-5 feet)	NA	Marshy	Stream	Yes	0.5	Native Soil Debris
B-1-115-1	4/23/2014 4:11:24 PM	Trash		Small (<2 feet)	NA	Vegetation	Steep	Yes	0.5	Native Soil
B-1-116-1	4/23/2014 4:14:44 PM	Trash		Small (<2 feet)	NA	Vegetation	Top of hill	Yes	0.5	Native Soil
B-1-124-1	4/24/2014 2:25:20 PM	Trash		Small (<2 feet)	NA	Vegetation	Hummocky	Yes	1.0	Native Soil
B-1-125-1	4/24/2014 2:28:56 PM	Trash Construction Materials		Medium (2-5 feet)	NA	Vegetation	Hummocky	Yes	2.0	Native Soil
B-1-126-1	4/24/2014 2:32:15 PM	Tires	tire near standing water	Medium (2-5 feet)	Rusted/Pitted	Water	Depression	Yes	1.0	Native Soil
B-1-127-1	4/24/2014 2:35:56 PM	Construction Materials Trash		Small (<2 feet)	NA	Vegetation	Top of hill	Yes	0.5	Native Soil
B-1-128-1	4/24/2014 2:58:55 PM	Trash Construction Materials		Medium (2-5 feet)	Rusted/Pitted	Vegetation	Hummocky	Yes	1.0	Native Soil
B-1-129-1	4/24/2014 3:14:46 PM	Trash		Small (<2 feet)	NA	Vegetation	Hummocky	Yes	1.0	Native Soil
B-1-130-1	4/24/2014 3:37:51 PM	Trash		Small (<2 feet)	NA	Vegetation	Hummocky	Yes	0.5	Native Soil
B-1-131-1	4/24/2014 3:40:22 PM	Trash Construction Materials		Medium (2-5 feet)	NA	Vegetation	Steep	Yes	1.5	Native Soil
B-1-132-1	4/24/2014 3:42:11 PM	Trash Construction Materials	edge of woods/property	Small (<2 feet)	NA	Hummocky	Top of hill	Yes	1.5	Native Soil
B-1-133-1	4/24/2014 3:50:56 PM	Trash Construction Materials		Small (<2 feet)	NA	Vegetation	Hummocky	Yes	1.5	Native Soil
B-1-143-1	4/25/2014 9:51:34 AM	Trash Construction Materials	edge of driveway	Large (>5 feet)	NA	Hummocky	Flat	Yes	1.0	Native Soil
B-1-144-1	4/25/2014 10:06:15 AM	Trash		Medium (2-5 feet)	NA	Rocks	Depression	Yes	0.5	Native Soil
B-1-145-1	4/25/2014 10:10:30 AM	Trash		Small (<2 feet)	NA	Vegetation	Flat	Yes	1.0	Native Soil
B-1-146-1	4/25/2014 10:16:03 AM	Trash		Small (<2 feet)	NA	Vegetation	Flat	Yes	1.0	Native Soil
B-1-147-1	4/25/2014 10:24:07 AM	Trash		Small (<2 feet)	Rusted/Pitted	Vegetation	Flat	Yes	0.5	Native Soil
B-1-148-1	4/25/2014 10:30:05 AM	Trash		Small (<2 feet)	NA	Vegetation	Flat	Yes	1.0	Native Soil
B-1-149-1	4/25/2014 10:41:14 AM	Trash		Small (<2 feet)	NA	Vegetation	Hummocky	Yes	0.5	Native Soil

Notes:

Letter listed in identifier is lot of origin
(i.e. "B-1-205-1" was collected from Lot B)

Hand augers were not advanced in some locations due to rocks/gravel, asphalt, water, debris, or thick vegetation including the presence of dense tree roots.

NA - Not applicable

**Appendix A - Table 4. Surface Refuse Summary-Level 1
Field Reconnaissance Survey Data
Ringwood Mines Landfill Site
Ringwood, New Jersey**

Identifier	General							Hand Auger		
	Date Collected	Object Type	General Observations	Amount	Condition	Land Type	Ground Surface Type	Completed?	Depth (feet)	Observations
B-2-108-1	4/23/2014 10:16:45 AM	Construction Materials	pvc pipe sticking out of ground like 4 inch well					No		
B-2-110-1	4/23/2014 11:41:07 AM	Trash	bottle	Small (<2 feet)		Vegetation	Flat	No		
B-2-111-1	4/23/2014 11:43:53 AM	Trash	can	Small (<2 feet)	NA	Vegetation	Flat	No		
B-2-112-1	4/23/2014 11:47:20 AM	Trash	bucket and can	Small (<2 feet)	NA	Vegetation	Flat	Yes	1.0	Native Soil
B-2-113-1	4/23/2014 11:52:46 AM	Trash	can	Small (<2 feet)	NA	Vegetation	Flat	No		
B-2-114-1	4/23/2014 11:59:29 AM	Trash Construction Materials	concrete	Medium (2-5 feet)	NA	Vegetation	Flat	No		
B-2-115-1	4/23/2014 2:10:25 PM	Construction Materials Trash	miscellaneous trash and car debris from parking lot	Large (>5 feet)	NA			No		
B-2-116-1	4/23/2014 2:15:14 PM	Trash	general road side trash, cans bottles, plastic	Medium (2-5 feet)	NA	Vegetation	Flat	No		
B-2-117-1	4/23/2014 2:17:27 PM	Tires Trash	tire and trash	Medium (2-5 feet)	NA	Vegetation	Flat	No		
B-2-118-1	4/23/2014 2:22:50 PM	Trash Tires	tire and roadside trash, bottles, cans	Medium (2-5 feet)	NA	Vegetation	Flat	No		
B-2-119-1	4/23/2014 2:48:27 PM	Trash	bottles and cans	Small (<2 feet)	NA	Vegetation	Flat	No		
B-2-120-1	4/23/2014 3:39:14 PM	Trash	old silt fence	Medium (2-5 feet)	NA	Vegetation	Flat	No		
B-2-138-1	4/24/2014 2:32:25 PM	Trash	cans and bottles	Small (<2 feet)	NA	Vegetation	Flat	No		
B-2-139-1	4/24/2014 2:42:49 PM	Trash	can	Small (<2 feet)	NA	Vegetation	Flat	No		
B-2-140-1	4/24/2014 2:59:01 PM	Construction Materials Trash	bricks and plastic	Small (<2 feet)	NA	Vegetation	Steep	No		
B-2-141-1	4/24/2014 3:11:01 PM	Trash	rusted metal beam	Medium (2-5 feet)	NA	Vegetation	Flat	Yes	1.0	Native Soil
B-2-142-1	4/24/2014 3:29:47 PM	Trash Construction Materials	rebar and plastic, bottles and glass	Small (<2 feet)	NA	Vegetation	Flat	Yes	1.0	Native Soil
B-2-143-1	4/25/2014 9:59:07 AM	Construction Materials	bricks and concrete	Small (<2 feet)	NA	Vegetation	Flat	No		
B-2-144-1	4/25/2014 10:04:22 AM	Tires Trash	tire on adjacent property	Large (>5 feet)	NA	Vegetation	Flat	No		
B-2-148-1	4/25/2014 11:28:11 AM	Tires	tire	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Flat	No		
B-3-110-1	4/23/2014 11:43:56 AM	Trash	white rock cola can on edge of grassy lot	Small (<2 feet)	Empty	Vegetation	Flat	Yes	0.5	Native Soil
B-3-110-2	4/23/2014 11:58:08 AM	Trash	bottle; edge of field	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil Fill
B-3-111-1	4/23/2014 11:36:36 AM	Trash	can; access road	Small (<2 feet)	NA	Rocks	Flat	No		
B-3-111-2	4/23/2014 2:14:11 PM	Trash	amber glass bottles	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-112-1	4/23/2014 11:58:26 AM	Trash	bottle, cans	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
B-3-112-2	4/23/2014 2:17:19 PM	Trash	amber glass bottles and a Budweiser can	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil

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NA - Not applicable

**Appendix A - Table 4. Surface Refuse Summary-Level 1
Field Reconnaissance Survey Data
Ringwood Mines Landfill Site
Ringwood, New Jersey**

Identifier	General							Hand Auger		
	Date Collected	Object Type	General Observations	Amount	Condition	Land Type	Ground Surface Type	Completed?	Depth (feet)	Observations
B-3-113-1	4/23/2014 2:20:18 PM	Trash	amber glass bottles ; one buried	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-114-1	4/23/2014 2:26:25 PM	Trash	two glass amber bottles	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-114-2	4/23/2014 2:08:18 PM	Tires		Small (<2 feet)	Rusted/Pitted	Vegetation	Flat	Yes	0.5	Native Soil
B-3-115-1	4/23/2014 2:40:54 PM	Trash	Budweiser can	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-116-1	4/23/2014 2:44:26 PM	Trash	plastic drink container	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-116-2	4/23/2014 2:14:26 PM	Trash	rusty can, bottle	Small (<2 feet)	Rusted/Pitted	Vegetation	Flat	Yes	0.5	Native Soil
B-3-117-1	4/23/2014 2:19:54 PM	Trash	bottles, plastic	Small (<2 feet)	NA	Rocks	Flat	Yes	0.5	Native Soil/Fill
B-3-117-2	4/23/2014 2:47:51 PM	Trash	large amber glass bottle	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-118-1	4/23/2014 2:26:44 PM	Trash Construction Materials	plastic, bottle, asphalt, cones	Small (<2 feet)	NA	Rocks	Top of hill	NA		Fill Debris
B-3-118-2	4/23/2014 2:51:01 PM	Trash	coca cola can	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-119-1	4/23/2014 3:00:49 PM	Trash	clear glass bottle	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-119-2	4/23/2014 2:37:18 PM	Trash	paper, plastic, glass	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
B-3-120-1	4/23/2014 3:11:34 PM	Trash Drum Piece	potential piece of drum	Small (<2 feet)	Rusted/Pitted	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-120-2	4/23/2014 2:43:14 PM	Trash Tires	plastic, cans	Medium (2-5 feet)	Empty	Vegetation	Flat	Yes	0.5	Native Soil
B-3-121-1	4/23/2014 3:28:23 PM	Construction Materials Trash	possible metal pipe; buried	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-121-2	4/23/2014 2:46:09 PM	Tires		Medium (2-5 feet)	Empty	Vegetation	Flat	Yes	0.5	Native Soil
B-3-122-1	4/23/2014 3:02:48 PM	Trash	rusted fan	Medium (2-5 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
B-3-122-2	4/23/2014 3:30:19 PM	Trash	clear glass bottles (as seen throughout line B-no labels), some buried; aluminum cans	Medium (2-5 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-123-1	4/23/2014 3:34:52 PM	Trash	some aluminum cans	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-123-2	4/23/2014 3:28:33 PM	Trash	plastic, bottles	Small (<2 feet)	NA	Vegetation	Flat	Yes	1.5	Native Soil
B-3-124-1	4/23/2014 3:38:56 PM	Trash	glass bottles (as seen throughout line B)	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-125-1	4/23/2014 3:44:41 PM	Trash	clear glass bottle	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-125-2	4/23/2014 3:42:16 PM	Trash	plastic, glass, asphalt	Small (<2 feet)	NA	Rocks	Steep	No		Fill
B-3-126-1	4/23/2014 3:49:20 PM	Construction Materials	small piece of possible metal pipe	Small (<2 feet)	Rusted/Pitted	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-126-2	4/23/2014 3:52:46 PM	Trash	plastic, glass, asphalt from driveway	Small (<2 feet)	NA	Rocks	Steep	No		Fill
B-3-127-1	4/23/2014 3:53:53 PM	Trash	glass bottle (same as seen throughout line B)	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-127-2	4/23/2014 4:00:02 PM	Trash	rusty can	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
B-3-128-1	4/23/2014 4:02:42 PM	Trash	cans	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
B-3-133-1	4/24/2014 2:16:45 PM	Trash	empty plastic soda cup	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-134-1	4/24/2014 2:19:04 PM	Trash	plastic bottle	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-134-2	4/24/2014 3:57:04 PM	Trash	aluminum cans, plastic bags	Medium (2-5 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-135-1	4/24/2014 4:01:23 PM	Trash	cans and bottles	Small (<2 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil

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NA - Not applicable

**Appendix A - Table 4. Surface Refuse Summary-Level 1
Field Reconnaissance Survey Data
Ringwood Mines Landfill Site
Ringwood, New Jersey**

Identifier	General							Hand Auger		
	Date Collected	Object Type	General Observations	Amount	Condition	Land Type	Ground Surface Type	Completed?	Depth (feet)	Observations
B-3-135-2	4/24/2014 2:26:39 PM	Trash	aluminum cans, some plastic bottles	Medium (2-5 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-136-1	4/24/2014 2:35:28 PM	Trash	household rug and metal blinds	Medium (2-5 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-137-1	4/24/2014 2:53:23 PM	Trash	aluminum can	Small (<2 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-138-1	4/24/2014 2:55:48 PM	Trash	aluminum cans	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-139-1	4/24/2014 3:42:29 PM	Trash	clear plastic bottles, aluminum can, rusted metal can top	Small (<2 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-140-1	4/24/2014 2:16:07 PM	Trash	can	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
B-3-140-2	4/24/2014 3:51:56 PM	Trash	landscaped area, plastic bottle	Small (<2 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-141-1	4/24/2014 3:41:08 PM	Trash	Styrofoam, paper, plastic	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
B-3-142-1	4/25/2014 9:51:27 AM	Trash	cans	Small (<2 feet)	NA	Vegetation	Flat	Yes	1.0	Native Soil
B-3-143-1	4/25/2014 9:57:10 AM	Trash	paper, plastic, bulb	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
B-3-143-2	4/25/2014 10:06:43 AM	Trash	2 glass bottles (one amber and one clear)	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-144-1	4/25/2014 10:10:16 AM	Trash	2 cans	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-144-2	4/25/2014 10:07:54 AM	Trash	dried drainage area; plastic refuse	Medium (2-5 feet)	NA	Vegetation	Stream	Yes	0.5	Native Soil
B-3-145-1	4/25/2014 10:12:24 AM	Trash	empty glass bottle	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-145-2	4/25/2014 10:13:38 AM	Trash	Styrofoam	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
B-3-146-1	4/25/2014 10:28:19 AM	Trash	plastic bottle and plastic bag	Small (<2 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil
B-3-146-2	4/25/2014 10:17:42 AM	Trash	bottles, plastic	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
B-3-147-1	4/25/2014 10:22:32 AM	Trash	paper, plastic, rusty metal, asphalt	Small (<2 feet)	NA	Rocks	Top of hill	Yes	0.5	Native Soil Fill
B-3-148-1	4/25/2014 11:08:20 AM	Trash	bottles, plastic	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil Fill
B-3-149-1	4/25/2014 11:10:51 AM	Trash	bottles, cans	Small (<2 feet)	NA	Vegetation	Top of hill	Yes	0.5	Native Soil
B-3-150-1	4/25/2014 11:31:44 AM	Trash	bottle	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
B-3-151-1	4/25/2014 11:39:37 AM	Trash	cans	Small (<2 feet)	NA	Vegetation	Depression	Yes	0.5	Native Soil
C-1-160-1	4/28/2014 12:53:18 PM	Trash		Small (<2 feet)	NA	Vegetation	Steep	Yes	1.0	Native Soil
C-1-162-1	4/28/2014 1:04:29 PM	Trash	gentle slope into forest/property built up?	Small (<2 feet)	NA	Vegetation	Steep	Yes	1.0	Native Soil
C-1-163-1	4/28/2014 1:13:44 PM	Trash	possible old access road? tablecloth	Medium (2-5 feet)	NA	Vegetation	Hummocky	Yes	1.5	Native Soil
C-1-164-1	4/28/2014 1:26:07 PM	Construction Materials Trash	pipe, metal debris, bags, Styrofoam	Large (>5 feet)	NA	Hummocky	Steep	Yes	1.5	Native Soil Debris
C-1-165-1	4/28/2014 1:56:42 PM	Trash	plastic bottle	Small (<2 feet)	NA	Vegetation	Steep	Yes	1.0	Native Soil

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NA - Not applicable

**Appendix A - Table 4. Surface Refuse Summary-Level 1
Field Reconnaissance Survey Data
Ringwood Mines Landfill Site
Ringwood, New Jersey**

Identifier	General							Hand Auger		
	Date Collected	Object Type	General Observations	Amount	Condition	Land Type	Ground Surface Type	Completed?	Depth (feet)	Observations
C-1-166-1	4/28/2014 2:09:15 PM	Trash		Medium (2-5 feet)	NA	Vegetation	Hummocky	Yes	0.5	Native Soil
C-1-167-1	4/28/2014 2:19:25 PM	Trash		Small (<2 feet)	NA	Vegetation	Hummocky	Yes	1.0	Native Soil
C-1-168-1	4/28/2014 2:36:11 PM	Trash		Small (<2 feet)	NA	Water	Stream	Yes	1.0	Native Soil
C-1-71-1	4/17/2014 10:47:15 AM	Trash	plastic bags	Small (<2 feet)	NA	Hummocky	Hummocky	Yes	1.0	Native Soil
C-2-163-1	4/28/2014 12:46:01 PM	Trash	old sealant cans	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Steep	Yes	2.0	Native Soil
C-2-164-1	4/28/2014 12:48:05 PM	Trash Construction Materials	Styrofoam bottles cans	Small (<2 feet)	NA	Vegetation	Steep	Yes	2.0	Native Soil
C-2-165-1	4/28/2014 12:50:21 PM	Trash	cans, cardboard	Small (<2 feet)	NA	Vegetation	Flat	Yes	2.0	Native Soil
C-3-165-1	4/28/2014 1:02:03 PM	Trash	plastic bags, trash	Medium (2-5 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil
C-3-166-1	4/28/2014 1:06:33 PM	Construction Materials	silt fence	Large (>5 feet)	NA	Hummocky	Steep	Yes	0.5	Native Soil
C-3-168-1	4/28/2014 1:15:39 PM	Trash	trash	Small (<2 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil
C-3-169-1	4/28/2014 1:45:21 PM	Trash	water supply sign	Small (<2 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil
C-3-173-1	4/28/2014 12:51:21 PM	Trash	plastic, paper	Small (<2 feet)	NA	Vegetation	Steep	Yes	0.5	Native Soil Fill
C-3-174-1	4/28/2014 12:54:46 PM	Trash	cardboard and plastic	Small (<2 feet)	NA	Vegetation	Steep	Yes	0.5	Native Soil Fill
C-3-175-1	4/28/2014 12:59:38 PM	Trash	plastic bottle and bag	Small (<2 feet)	NA	Vegetation	Steep	Yes	0.5	Native Soil
C-3-176-1	4/28/2014 1:17:17 PM	Trash	wooden stake and silt fence	Medium (2-5 feet)	NA	Vegetation	Flat	Yes	1.0	Native Soil
C-3-177-1	4/28/2014 1:30:36 PM	Trash	plastic	Small (<2 feet)	NA	Vegetation	Steep	Yes	1.0	Native Soil
C-3-178-1	4/28/2014 1:47:13 PM	Trash	paper	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
C-3-179-1	4/28/2014 1:54:27 PM	Trash	balloon	Small (<2 feet)	NA	Vegetation	Flat	Yes	1.0	Native Soil
C-3-180-1	4/28/2014 2:25:56 PM	Trash	plastic, Styrofoam	Small (<2 feet)	NA	Vegetation	Steep	Yes	0.5	Native Soil
C-3-181-1	4/28/2014 2:29:32 PM	Trash	plastic, tubing	Small (<2 feet)	NA	Vegetation	Steep	Yes	0.5	Native Soil
D-1-188-1	5/8/2014 11:02:48 AM	Trash	Styrofoam cup and bubble wrap	Small (<2 feet)	NA	Hummocky	Slope	Yes	0.5	Native Soil
D-1-190-1	5/8/2014 3:18:21 PM	Trash Construction Materials	mining car cable and plastic debris	Large (>5 feet)	Rusted/Pitted	Hummocky	Steep	Yes	0.5	Fill Native Soil
D-1-191-1	5/8/2014 3:21:37 PM	Construction Materials Trash	cables/RR/mines	Large (>5 feet)	Rusted/Pitted	Hummocky	Steep	Yes	0.5	Native Soil Fill
D-1-192-1	5/8/2014 3:25:10 PM	Tires Trash		Medium (2-5 feet)	NA	Water	Stream	Yes	0.5	Native Soil Fill
D-1-65-1	4/17/2014 9:51:16 AM	Trash		Small (<2 feet)	NA	Hummocky	Flat	Yes	1.0	Native Soil
D-1-66-1	4/17/2014 9:55:56 AM	Trash		Small (<2 feet)	NA	Vegetation	Top of hill	Yes	1.0	Native Soil
D-1-67-1	4/17/2014 9:59:38 AM	Trash Construction Materials		Small (<2 feet)	NA	Rocks	Stream	Yes	1.0	Native Soil
D-1-68-1	4/17/2014 10:13:22 AM	Trash	near old RR	Small (<2 feet)	NA	Rocks	Flat	Yes	1.0	Native Soil
D-1-68-2	4/18/2014 10:30:03 AM	Trash		Small (<2 feet)	NA	Rocks	Steep	Yes	0.5	Native Soil

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**Appendix A - Table 4. Surface Refuse Summary-Level 1
Field Reconnaissance Survey Data
Ringwood Mines Landfill Site
Ringwood, New Jersey**

Identifier	General							Hand Auger		
	Date Collected	Object Type	General Observations	Amount	Condition	Land Type	Ground Surface Type	Completed?	Depth (feet)	Observations
D-1-69-1	4/17/2014 10:19:45 AM	Construction Materials Trash	potential Paint sludge or road paint	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Steep	Yes	1.0	Native Soil
D-1-70-1	4/17/2014 10:23:58 AM	Trash Tires	tire and slag	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Steep	Yes	0.5	Native Soil
D-2-100-1	4/17/2014 9:58:23 AM	Tires		Small (<2 feet)	NA	Vegetation	Stream			
D-2-101-1	4/17/2014 10:03:33 AM	Trash	bottle	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
D-2-102-1	4/17/2014 10:12:37 AM	Trash	shopping cart	Small (<2 feet)	Rusted/Pitted	Vegetation	Steep	No		
D-2-103-1	4/18/2014 12:43:23 PM	Trash	tree line off pipeline right of way	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Hummocky	Yes	0.5	Native Soil
D-2-103-2	4/17/2014 10:17:18 AM	Construction Materials Trash	railroad	Large (>5 feet)	NA	Marshy	Steep	NA		
D-2-104-1	4/17/2014 10:42:49 AM	Trash	plastic jug	Small (<2 feet)	NA	Vegetation	Flat	No		
D-2-105-1	4/17/2014 2:32:00 PM	Trash	sofa	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Top of hill	No		
D-2-106-1	4/17/2014 2:55:41 PM	Trash	balloon string	Small (<2 feet)	NA	Rocks	Top of hill	Yes	0.5	Native Soil
D-2-188-1	5/8/2014 10:14:54 AM	Trash	plastic bag	Small (<2 feet)	NA	Vegetation	Flat	Yes	1.5	Native Soil
D-2-191-1	5/8/2014 3:25:04 PM	Trash Construction Materials	several bottles, cans, plastic wrappers,	Medium (2-5 feet)	NA	Vegetation	Slope	No		
D-2-95-1	4/17/2014 9:39:54 AM	Trash Construction Materials	concrete, fence, cans, trash	Large (>5 feet)	NA	Vegetation	Steep	No		
D-2-96-1	4/17/2014 9:48:33 AM	Trash Liquid Containers	rusted metal bucket	Small (<2 feet)	Rusted/Pitted	Vegetation	Flat	No		
D-2-97-1	4/17/2014 9:49:57 AM	Trash Tires		Medium (2-5 feet)	NA	Water	Stream	No		
D-2-98-1	4/17/2014 9:51:19 AM	Trash	bottles	Small (<2 feet)	NA	Water	Stream	No		
D-2-99-1	4/17/2014 9:56:43 AM	Tires		Small (<2 feet)	NA	Water	Stream	No		
D-3-100-1	4/17/2014 10:15:31 AM	Tires Construction Materials	tire and telephone pole	Medium (2-5 feet)	NA	Vegetation	Hummocky	No		
D-3-101-1	4/17/2014 2:21:38 PM	Trash	empty plastic oil container	Small (<2 feet)	Empty	Vegetation	Top of hill	No		
D-3-102-1	4/18/2014 10:09:54 AM	Trash	balloon	Small (<2 feet)	NA	Vegetation	Steep	Yes	0.5	Native Soil
D-3-103-1	4/18/2014 10:36:52 AM	Trash	balloons	Small (<2 feet)	NA	Rocks	Steep	Yes	0.5	Native Soil
D-3-104-1	4/18/2014 10:56:52 AM	Trash	balloon	Small (<2 feet)	NA	Vegetation	Steep	Yes	0.5	Native Soil
D-3-105-1	4/18/2014 2:49:39 PM	Trash	sign			Vegetation	Steep	NA		
D-3-106-1	4/21/2014 3:22:00 PM	Trash	plastic	Small (<2 feet)	NA	Vegetation	Steep	Yes	0.5	Native Soil
D-3-108-1	4/21/2014 3:13:47 PM	Trash	5 lb bag of diamond crystal winter melt	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
D-3-109-1	4/22/2014 11:43:21 AM	Trash	balloon	Small (<2 feet)	NA	Vegetation	Steep	Yes	0.5	Native Soil
D-3-109-2	4/22/2014 10:31:43 AM	Trash	red canister nozzle. "daves scent canisters"	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil

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NA - Not applicable

**Appendix A - Table 4. Surface Refuse Summary-Level 1
Field Reconnaissance Survey Data
Ringwood Mines Landfill Site
Ringwood, New Jersey**

Identifier	General							Hand Auger		
	Date Collected	Object Type	General Observations	Amount	Condition	Land Type	Ground Surface Type	Completed?	Depth (feet)	Observations
D-3-124-1	4/23/2014 3:37:54 PM	Trash	cans, plastic	Small (<2 feet)	NA	Vegetation	Top of hill	Yes	1.0	Native Soil
D-3-184-1	5/8/2014 10:27:38 AM	Trash	balloon; still part of access road	Small (<2 feet)	NA	Vegetation	Slope	Yes	1.0	Native Soil
D-3-185-1	5/8/2014 10:44:59 AM	Trash	plastic	Small (<2 feet)	NA	Vegetation	Slope	Yes	0.5	Native Soil
D-3-186-1	5/8/2014 11:03:06 AM	Trash	plastic	Small (<2 feet)	NA	Vegetation	Slope	Yes	1.0	Native Soil
D-3-187-1	5/8/2014 3:05:25 PM	Trash	plastic container	Small (<2 feet)	NA	Vegetation	Slope	Yes	0.5	Native Soil
D-3-188-1	5/8/2014 3:20:47 PM	Tires Trash	Styrofoam, paper	Medium (2-5 feet)	Empty	Marshy	Flat	Yes	0.5	Native Soil
D-3-188-2	5/8/2014 10:17:17 AM	Trash	empty bag of ice melt, cup, plastic bag	Small (<2 feet)	NA	Vegetation	Slope			
D-3-189-1	5/8/2014 3:22:45 PM	Tires		Medium (2-5 feet)	Empty	Marshy	Flat	Yes	0.5	Native Soil
D-3-189-2	5/8/2014 10:24:24 AM	Trash	plastic sheeting	Small (<2 feet)	NA	Vegetation	Flat	No		
D-3-190-1	5/8/2014 2:59:08 PM	Trash	broken wooden ladder	Medium (2-5 feet)	NA	Vegetation	Slope	No		
D-3-190-2	5/8/2014 3:25:06 PM	Tires	adjacent to stream. 2 tires, glass bottles	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Flat	Yes	0.5	Native Soil
D-3-191-1	5/8/2014 3:17:33 PM	Tires	one tire with rim	Small (<2 feet)	NA	Vegetation	Bottom of slope	No		
D-3-191-2	5/8/2014 3:29:44 PM	Tires Trash	1 tire, plastic bottle	Medium (2-5 feet)	Empty	Vegetation	Flat	Yes	0.5	Native Soil
D-3-192-1	5/8/2014 3:31:56 PM	Tires Trash	3 tires, skateboard, Christmas lights	Medium (2-5 feet)	Empty	Vegetation	Hummocky	Yes	0.5	Native Soil
D-3-192-2	5/8/2014 3:19:46 PM	Tires Trash	various cans, bottles and one tire. also a small piece of slag	Small (<2 feet)	NA	Vegetation	Flat	No		
D-3-193-1	5/8/2014 3:23:27 PM	Trash	cable	Small (<2 feet)	NA	Water	Stream	No		
D-3-193-2	5/8/2014 3:35:18 PM	Trash	rusty chair, plastic, cans, rusty umbrella	Small (<2 feet)	NA	Vegetation	Stream	Yes	0.5	Native Soil
D-3-83-1	4/17/2014 9:50:23 AM	Trash	glass bottles	Small (<2 feet)	NA	Vegetation	Top of hill	No		
D-3-84-1	4/17/2014 9:52:46 AM	Trash	rusted metal container or paint can	Small (<2 feet)	Rusted/Pitted	Vegetation	Top of hill	No		
D-3-85-1	4/17/2014 9:58:38 AM	Trash	plastic	Small (<2 feet)	NA	Vegetation	Stream	Yes	0.5	Native Soil
D-3-86-1	4/17/2014 10:07:55 AM	Tires Trash	plastic and wood trash	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Stream	Yes	1.0	Native Soil
D-3-87-1	4/17/2014 2:51:28 PM	Trash	2 wooden chairs	Medium (2-5 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
D-3-88-1	4/17/2014 3:34:35 PM	Trash	minor hummocks; cardboard; bottles	Small (<2 feet)	NA	Vegetation	Hummocky	Yes	0.5	Native Soil
D-3-95-1	4/17/2014 9:42:17 AM	Trash	bottles, bike tire, plastic sheeting	Small (<2 feet)	NA	Rocks	Flat	No		
D-3-96-1	4/17/2014 9:44:02 AM	Tires	truck tire	Medium (2-5 feet)	NA	Rocks	Flat	No		
D-3-97-1	4/17/2014 9:51:09 AM	Liquid Containers Trash	rusted can	Small (<2 feet)	Rusted/Pitted	Vegetation	Flat	No		
D-3-98-1	4/17/2014 9:53:47 AM	Tires	tire	Medium (2-5 feet)	NA	Water	Stream	No		
D-3-99-1	4/17/2014 9:59:08 AM	Trash	rusted pail, plastic sheeting on side of rail bed	Small (<2 feet)	NA	Rocks	Steep	No		
E-1-18-1	4/10/2014 9:51:42 AM	Tires Trash Construction Materials		Medium (2-5 feet)	Rusted/Pitted	Rocks	Stream	Yes	0.5	Native Soil
E-1-19-1	4/10/2014 10:56:53 AM	Trash Construction Materials Tires	edge of stream	Medium (2-5 feet)	Rusted/Pitted	Rocks	Stream	Yes	0.5	Native Soil

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**Appendix A - Table 4. Surface Refuse Summary-Level 1
Field Reconnaissance Survey Data
Ringwood Mines Landfill Site
Ringwood, New Jersey**

Identifier	General							Hand Auger		
	Date Collected	Object Type	General Observations	Amount	Condition	Land Type	Ground Surface Type	Completed?	Depth (feet)	Observations
E-1-22-1	4/10/2014 1:55:46 PM	Tires Construction Materials Trash		Medium (2-5 feet)	NA	Hummocky	Hummocky	Yes	1.0	Native Soil
E-2-22-1	4/10/2014 9:31:13 AM	Trash Tires		Small (<2 feet)	NA	Vegetation	Stream	No		
E-2-23-1	4/10/2014 9:32:44 AM	Trash Tires		Medium (2-5 feet)	Rusted/Pitted	Marshy	Stream	No		
E-2-24-1	4/10/2014 9:34:26 AM		sheen on water					No		
E-2-25-1	4/10/2014 9:56:41 AM	Liquid Containers Trash	rusted metal / road paint remnants	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Stream	No		
E-2-26-1	4/10/2014 9:58:57 AM	Trash Construction Materials		Medium (2-5 feet)	Rusted/Pitted	Vegetation	Hummocky	No		
E-2-28-1	4/10/2014 10:06:21 AM		medical waste					No		
E-2-31-1	4/10/2014 10:29:18 AM	Trash	metal trash	Medium (2-5 feet)	Rusted/Pitted	Rocks	Steep	No		
E-2-32-1	4/10/2014 10:31:13 AM	Tires	2 tires	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Stream	No		
E-2-34-1	4/10/2014 10:55:58 AM	Tires		Medium (2-5 feet)	NA	Vegetation	Stream	No		
E-2-35-1	4/10/2014 11:13:47 AM	Trash Construction Materials	wood	Large (>5 feet)	Rusted/Pitted	Rocks	Steep	No		
E-2-36-1	4/10/2014 11:18:12 AM		sign					No		
E-2-37-1	4/10/2014 11:23:34 AM		sign					No		
E-2-38-1	4/10/2014 11:30:35 AM	Construction Materials Trash	roof tiles	Medium (2-5 feet)	NA	Vegetation	Hummocky	No		
E-2-40-1	4/10/2014 1:06:47 PM	Tires Trash		Medium (2-5 feet)	NA	Vegetation	Stream	No		
E-2-42-1	4/10/2014 1:11:19 PM	Trash Tires		Large (>5 feet)	Rusted/Pitted	Hummocky	Hummocky	No		
E-2-46-1	4/11/2014 10:52:03 AM	Trash Tires		Medium (2-5 feet)	Rusted/Pitted	Vegetation	Stream	No		
E-2-47-1	4/11/2014 10:57:58 AM	Trash Tires		Medium (2-5 feet)	Rusted/Pitted	Vegetation	Stream	No		
G-1-56-1	4/14/2014 11:24:07 AM	Trash		Small (<2 feet)	Rusted/Pitted	Water	Stream	Yes	1.5	Native Soil
G-1-57-1	4/14/2014 11:34:22 AM	Trash Construction Materials	Car parts, bottles, cables and misc.	Medium (2-5 feet)	Rusted/Pitted	Hummocky	Hummocky	Yes	1.5	Native Soil Debris
G-1-58-1	4/14/2014 11:48:10 AM	Tires	tire near stream	Medium (2-5 feet)	Rusted/Pitted	Water	Stream	Yes	1.5	Native Soil
G-1-60-1	4/14/2014 2:35:27 PM	Trash		Medium (2-5 feet)	Rusted/Pitted	Vegetation	Flat	Yes	0.5	Native Soil
G-1-61-1	4/14/2014 3:14:35 PM	Tires	edge of stream	Medium (2-5 feet)	Empty	Water	Stream	Yes	0.5	Native Soil Fill
G-1-62-1	4/14/2014 3:39:27 PM	Trash	plastic and piece of tin foil	Small (<2 feet)	NA	Vegetation	Steep	Yes	1.0	Native Soil
G-2-43-1	4/11/2014 10:18:53 AM	Trash	muffler	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Flat	No		

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Field Reconnaissance Survey Data
Ringwood Mines Landfill Site
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Identifier	General							Hand Auger		
	Date Collected	Object Type	General Observations	Amount	Condition	Land Type	Ground Surface Type	Completed?	Depth (feet)	Observations
G-2-51-1	4/11/2014 2:28:47 PM	Trash		Small (<2 feet)	Rusted/Pitted	Vegetation	Stream	No		
G-2-53-1	4/11/2014 2:39:06 PM	Trash	foam	Small (<2 feet)	NA	Vegetation	Stream	No		
G-2-54-1	4/11/2014 2:41:03 PM	Trash		Small (<2 feet)	NA	Vegetation	Flat	No		
G-2-56-1	4/14/2014 9:56:57 AM	Trash		Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
G-2-57-1	4/14/2014 10:04:06 AM							Yes	1.0	Native Soil
G-2-58-1	4/14/2014 11:11:34 AM	Tires		Large (>5 feet)	Rusted/Pitted	Vegetation	Flat	No		
G-2-59-1	4/14/2014 11:13:22 AM	Tires		Small (<2 feet)	Rusted/Pitted	Vegetation	Flat	No		
G-2-60-1	4/14/2014 11:19:54 AM	Trash Drum Pieces	rusted metal	Small (<2 feet)	Rusted/Pitted	Vegetation	Flat	No		
G-2-61-1	4/14/2014 11:21:42 AM	Tires		Medium (2-5 feet)	NA	Vegetation	Flat	No		
G-2-62-1	4/14/2014 11:24:06 AM	Trash Construction Materials	cinderblock	Small (<2 feet)	NA	Vegetation	Flat	No		
G-2-63-1	4/14/2014 11:25:58 AM	Trash Construction Materials	bottles metal concrete wires	Small (<2 feet)	NA	Vegetation	Steep	No		
G-2-64-1	4/14/2014 11:29:44 AM	Tires		Medium (2-5 feet)	Rusted/Pitted	Water	Stream	No		
G-2-66-1	4/14/2014 11:37:01 AM	Trash	trash	Small (<2 feet)	NA	Vegetation	Stream	No		
G-2-67-1	4/14/2014 11:56:39 AM	Trash	holes in bucket lid	Small (<2 feet)	Rusted/Pitted	Vegetation	Stream	No		
G-2-68-1	4/14/2014 2:02:50 PM	Trash	plastic oil container	Small (<2 feet)	NA	Vegetation	Flat	No		
G-2-69-1	4/14/2014 3:17:19 PM	Trash	balloon	Small (<2 feet)	NA	Vegetation	Steep	No		
G-2-70-1	4/14/2014 3:47:45 PM	Trash	can	Small (<2 feet)	NA	Vegetation	Top of hill	No		
H-2-12-1	4/8/2014 12:33:57 PM	Construction Materials	marker	Small (<2 feet)	NA	Rocks	Steep	No		
H-2-13-1	4/8/2014 1:14:34 PM	Trash	toilet	Large (>5 feet)	NA	Marshy	Stream	No		
H-2-14-1	4/8/2014 3:50:14 PM	Trash	Styrofoam and other trash	Medium (2-5 feet)	NA	Rocks	Hummocky	No		
H-2-15-1	4/8/2014 3:53:19 PM	Trash Construction Materials		Small (<2 feet)	Rusted/Pitted	Rocks	Stream	No		
H-2-16-1	4/9/2014 1:07:04 PM	Trash Tires	car chassis	Large (>5 feet)	Rusted/Pitted	Vegetation	Top of hill	No		
H-2-17-1	4/9/2014 1:18:56 PM	Construction Materials Trash	wood	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Depression	No		
H-2-18-1	4/9/2014 3:23:18 PM	Trash	cheese container	Small (<2 feet)	Empty	Vegetation	Top of hill	No		
H-2-19-1	4/9/2014 3:27:45 PM		Q end					No		
H-2-20-1	4/9/2014 3:30:49 PM		P end					No		
H-2-21-1	4/9/2014 3:33:54 PM	Tires	tire	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Flat	No		
H-3-184-1	5/6/2014 9:54:02 AM	Tires		Medium (2-5 feet)	Empty	Vegetation	Flat	Yes	0.5	Native Soil

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Identifier	General							Hand Auger		
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H-3-185-1	5/6/2014 10:02:32 AM	Tires		Medium (2-5 feet)	Empty	Water	Stream	NA		
H-3-186-1	5/6/2014 10:33:07 AM	Tires		Medium (2-5 feet)	Empty	Marshy	Stream	Yes	1.0	Native Soil
H-3-187-1	5/6/2014 10:48:41 AM	Trash	bottle	Small (<2 feet)	NA	Marshy	Flat	No		
I-2-4-1	4/8/2014 9:27:41 AM	Construction Materials Trash Tires	debris	Medium (2-5 feet)	NA	Vegetation	Flat	No		
I-2-5-1	4/8/2014 9:34:09 AM	Construction Materials Liquid Containers Trash	cheese containers	Large (>5 feet)	NA	Vegetation	Hummocky	No		
J-2-10-1	4/8/2014 10:59:49 AM	Liquid Containers		Large (>5 feet)	Rusted/Pitted	Vegetation	Flat	No		
J-2-11-1	4/8/2014 11:08:57 AM	Trash	orange water	Medium (2-5 feet)	NA	Marshy	Stream	No		
J-2-6-1	4/8/2014 10:10:34 AM	Trash	orange water	Medium (2-5 feet)	Rusted/Pitted	Water	Stream	No		
J-2-7-1	4/8/2014 10:18:51 AM	Trash	trash	Medium (2-5 feet)	NA	Vegetation	Depression	No		
J-2-8-1	4/8/2014 10:49:17 AM	Trash Construction Materials	steel metal dumping area	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Top of hill	No		
K-1-56-1	4/15/2014 9:53:06 AM	Trash	roadside trash	Small (<2 feet)	NA	Vegetation	Steep	No		
K-1-57-1	4/15/2014 10:05:09 AM	Trash	apparent pressure tank	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Flat	No		
K-1-59-1	4/15/2014 10:17:39 AM	Construction Materials	metal strap	Medium (2-5 feet)	Rusted/Pitted	Rocks	Stream	No		
K-1-60-1	4/15/2014 10:21:06 AM	Trash	truck rear axle	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Steep	No		
K-1-61-1	4/15/2014 10:27:06 AM	Empty drum Trash	empty 35gallon drum, auto parts	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Top of hill	No		
K-1-62-1	4/15/2014 10:37:31 AM	Trash	trash	Small (<2 feet)	NA	Vegetation	Top of hill	No		
K-1-62-2	4/15/2014 10:34:21 AM	Tires	tire	Medium (2-5 feet)	NA	Vegetation	Steep	No		
K-1-63-1	4/15/2014 10:35:43 AM	Trash	plastic gasoline can	Small (<2 feet)	Empty	Water	Stream	No		
K-1-64-1	4/15/2014 10:53:57 AM	Trash	general trash	Small (<2 feet)	NA	Vegetation	Top of hill	No		
K-1-65-1	4/16/2014 9:49:21 AM	Trash	wood pile	Medium (2-5 feet)	NA	Vegetation	Flat	No		
K-1-66-1	4/16/2014 11:40:26 AM	Trash	bottles, trash on top of hill	Small (<2 feet)	NA	Vegetation	Top of hill	No		
K-2-71-1	4/15/2014 9:39:32 AM	Trash	trash	Medium (2-5 feet)	NA	Marshy	Steep	No		
K-2-72-1	4/15/2014 9:43:44 AM	Tires		Small (<2 feet)	NA	Vegetation	Flat	No		
K-2-73-1	4/15/2014 10:08:27 AM	Trash	wood debris	Large (>5 feet)	NA	Vegetation	Steep	No		
K-2-74-1	4/15/2014 10:16:55 AM	Trash	cans	Small (<2 feet)	NA	Vegetation	Top of hill	No		
K-2-75-1	4/15/2014 10:21:51 AM	Trash	ceramic	Small (<2 feet)	NA	Vegetation	Top of hill	No		

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Identifier	General							Hand Auger		
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K-2-77-1	4/15/2014 10:25:23 AM	Trash	metal bucket	Small (<2 feet)	Rusted/Pitted	Vegetation	Top of hill	No		
K-2-78-1	4/15/2014 10:26:45 AM	Trash	metal bucket	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Top of hill	No		
K-2-79-1	4/15/2014 10:30:54 AM	Trash	cans	Small (<2 feet)	NA	Vegetation	Top of hill	No		
K-2-80-1	4/15/2014 10:41:54 AM	Trash	wires	Small (<2 feet)	NA	Vegetation	Steep	No		
K-2-81-1	4/15/2014 10:46:28 AM	Trash	wire rebar	Small (<2 feet)	NA	Vegetation	Steep	No		
K-2-82-1	4/15/2014 11:12:19 AM	Trash	wood debris	Large (>5 feet)	NA	Vegetation	Steep	No		
K-2-83-1	4/16/2014 10:52:23 AM	Trash		Small (<2 feet)	NA	Vegetation	Top of hill	No		
L-2-1-1	4/7/2014 11:47:22 AM	Trash	plastic sheet	1	NA	Vegetation	Top of hill	No		
M-2-2-1	4/7/2014 12:34:24 PM	Trash	tarp	1	NA	Vegetation	Flat	No		
M-2-3-1	4/7/2014 12:52:18 PM	Trash	base of retaining wall	10	NA	Vegetation	Flat	No		
O-1-4-1	4/8/2014 11:34:52 AM	Trash		Medium (2-5 feet)	NA	Vegetation	Flat	No		
R-1-67-1	4/16/2014 2:25:00 PM	Tires Trash	tire and trash	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Flat	No		
R-1-68-1	4/16/2014 2:28:23 PM	Trash	tackle box and rusty metal	Small (<2 feet)	NA	Vegetation	Flat	No		
R-1-69-1	4/16/2014 2:33:54 PM	Trash	steel pipe	Small (<2 feet)	Rusted/Pitted	Vegetation	Flat	No		
R-1-70-1	4/16/2014 2:36:26 PM	Trash	large steel container with wood inside	Large (>5 feet)	Rusted/Pitted	Vegetation	Flat	No		
R-1-71-1	4/16/2014 2:50:58 PM	Trash	fuses, fittings, garbage	Small (<2 feet)	NA	Vegetation	Flat	No		
R-1-72-1	4/16/2014 2:57:27 PM	Trash	cans and garbage	Small (<2 feet)	NA	Vegetation	Flat	No		
R-1-73-1	4/16/2014 3:01:42 PM	Trash	trash, plastic	Small (<2 feet)	NA	Vegetation	Flat	No		
R-1-74-1	4/16/2014 3:05:24 PM	Construction Materials Trash	asphalt and garbage	Small (<2 feet)	NA	Vegetation	Flat	No		
R-1-75-1	4/16/2014 3:07:24 PM	Trash Liquid Containers	1 empty algaecide bottle, 3 bleach bottles	Small (<2 feet)	Empty	Vegetation	Flat	No		
R-1-76-1	4/16/2014 3:11:33 PM	Construction Materials Trash	concrete footings, wood, asphalt	Medium (2-5 feet)	NA	Vegetation	Flat	No		
R-1-77-1	4/16/2014 3:15:09 PM	Trash	corrugated pipe pieces	Small (<2 feet)	NA	Marshy	Flat	No		
R-1-78-1	4/16/2014 3:18:13 PM	Trash Construction Materials	steel beam, wood, plastic bottles, asphalt	Medium (2-5 feet)	NA	Vegetation	Flat	No		
R-1-79-1	4/16/2014 3:24:01 PM	Crushed Empty Metal Drums	apparent crushed drum(s)	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Flat	No		
R-1-80-1	4/16/2014 3:30:06 PM	Trash Construction Materials	garbage, telephone poles	Large (>5 feet)	NA	Vegetation	Flat	No		
R-1-81-1	4/16/2014 3:34:21 PM	Liquid Containers Trash	two empty plastic gasoline cans	Small (<2 feet)	Empty	Vegetation	Flat	No		
R-1-82-1	4/16/2014 3:36:49 PM	Trash	two large batteries	Small (<2 feet)	NA	Vegetation	Flat	No		

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NA - Not applicable

**Appendix A - Table 4. Surface Refuse Summary-Level 1
Field Reconnaissance Survey Data
Ringwood Mines Landfill Site
Ringwood, New Jersey**

Identifier	General							Hand Auger		
	Date Collected	Object Type	General Observations	Amount	Condition	Land Type	Ground Surface Type	Completed?	Depth (feet)	Observations
R-1-83-1	4/16/2014 3:39:40 PM	Construction Materials Trash	concrete slabs, bottles, park bench	Medium (2-5 feet)	NA	Vegetation	Steep	No		
R-1-84-1	4/16/2014 3:44:32 PM	Trash Construction Materials	concrete, trash, cable	Medium (2-5 feet)	NA	Vegetation	Steep	No		
R-1-85-1	4/16/2014 3:50:49 PM	Trash	mud pan, metal poles, trash, asphalt	Medium (2-5 feet)	NA	Marshy	Stream	No		
R-2-85-1	4/16/2014 2:32:49 PM	Trash	plastic	Small (<2 feet)	NA	Vegetation	Flat	No		
R-2-86-1	4/16/2014 2:35:40 PM	Tires	1 tire	Small (<2 feet)	Rusted/Pitted	Vegetation	Flat	No		
R-2-87-1	4/16/2014 2:46:08 PM	Trash	metal debris	Medium (2-5 feet)	Rusted/Pitted	Marshy	Stream	No		
R-2-88-1	4/16/2014 2:47:45 PM	Trash	plastic	Small (<2 feet)	NA	Vegetation	Flat	No		
R-2-89-1	4/16/2014 2:49:26 PM	Trash	road trash, bottles	Small (<2 feet)	NA	Vegetation	Flat	No		
R-2-90-1	4/16/2014 3:05:23 PM	Trash	cheese container	Small (<2 feet)	NA	Marshy	Flat	No		
R-2-93-1	4/16/2014 4:03:28 PM	Trash	can	Small (<2 feet)	NA	Vegetation	Flat	No		
R-2-94-1	4/16/2014 4:19:31 PM	Trash	metal rod and trash	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Stream	No		
S-1-117-1	4/24/2014 9:42:01 AM	Trash Construction Materials		Medium (2-5 feet)	NA	Rocks	Flat	Yes	0.5	Native Soil Debris
S-1-118-1	4/24/2014 9:46:56 AM	Trash		Medium (2-5 feet)	NA	Vegetation	Flat	Yes	1.5	Native Soil
S-1-119-1	4/24/2014 9:52:10 AM	Trash		Medium (2-5 feet)	NA	Rocks	Flat	Yes	0.5	Native Soil
S-1-120-1	4/24/2014 10:14:54 AM	Trash Construction Materials		Small (<2 feet)	NA	Vegetation	Hummocky	Yes	1.0	Native Soil
S-1-121-1	4/24/2014 11:09:07 AM	Construction Materials Trash Drums Liquid Containers		Medium (2-5 feet)	Rusted/Pitted	Hummocky	Hummocky	Yes	1.0	Native Soil
S-1-122-1	4/24/2014 11:17:06 AM	Trash Construction Materials		Medium (2-5 feet)	NA	Hummocky	Depression	Yes	0.5	Native Soil
S-1-123-1	4/24/2014 11:28:16 AM	Trash Construction Materials Liquid Containers		Small (<2 feet)	Rusted/Pitted	Vegetation	Flat	Yes	0.5	Fill
S-2-121-1	4/24/2014 9:39:40 AM	Trash	car battery and fluorescent light	Small (<2 feet)		Vegetation	Flat	Yes	1.0	Native Soil
S-2-122-1	4/24/2014 9:43:33 AM	Trash	metal cylinder	Small (<2 feet)	Rusted/Pitted	Vegetation	Flat	No		
S-2-123-1	4/24/2014 9:45:19 AM	Trash	assorted bottles and cans	Small (<2 feet)	NA	Vegetation	Stream	No		
S-2-125-1	4/24/2014 10:01:58 AM	Construction Materials	brick fire pit ?	Small (<2 feet)	NA	Vegetation	Steep	No		
S-2-126-1	4/24/2014 10:14:27 AM	Possible Empty Crushed Metal Drums	crushed metal possible drum	Small (<2 feet)	Rusted/Pitted	Vegetation	Flat	No		
S-2-127-1	4/24/2014 10:18:57 AM	Empty Rusted Drums	empty rusted drum	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Steep	No		
S-2-128-1	4/24/2014 10:21:27 AM	Construction Materials	fiberglass and wood	Medium (2-5 feet)	NA	Vegetation	Steep	No		
S-2-129-1	4/24/2014 10:24:53 AM	Liquid Containers Trash	old gas can and plastic bag	Small (<2 feet)	Rusted/Pitted	Vegetation	Steep	No		

Notes:

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NA - Not applicable

**Appendix A - Table 4. Surface Refuse Summary-Level 1
Field Reconnaissance Survey Data
Ringwood Mines Landfill Site
Ringwood, New Jersey**

Identifier	General							Hand Auger		
	Date Collected	Object Type	General Observations	Amount	Condition	Land Type	Ground Surface Type	Completed?	Depth (feet)	Observations
S-2-130-1	4/24/2014 10:43:29 AM	Tires	tire	Small (<2 feet)	NA	Vegetation	Flat	No		
S-2-131-1	4/24/2014 10:48:22 AM	Trash Tires	old atv tires buckets electrical supplies	Medium (2-5 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
S-2-132-1	4/24/2014 10:52:53 AM	Construction Materials Liquid Containers Trash	old buckets, bottle trash	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Steep	No		
S-2-133-1	4/24/2014 10:56:33 AM	Trash	trash from parking lot runoff	Small (<2 feet)	NA	Vegetation	Crevice	No		
S-2-134-1	4/24/2014 11:06:05 AM	Liquid Containers	paint cans	Small (<2 feet)	Rusted/Pitted	Vegetation	Steep	No		
S-2-136-1	4/24/2014 11:24:08 AM	Liquid Containers Trash	old paint cans bottles hose	Small (<2 feet)	Rusted/Pitted	Vegetation	Flat	No		
S-2-137-1	4/24/2014 11:27:59 AM	Emty Metal Drums Trash	drum fastener and trash	Small (<2 feet)	NA	Vegetation	Flat	No		
S-3-129-1	4/24/2014 9:41:58 AM	Trash	bottles, plastic, paper	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
S-3-129-2	4/24/2014 11:28:05 AM	Trash	some plastic bags and a political sign for sheriff barding re-election	Small (<2 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil
S-3-130-1	4/24/2014 9:46:47 AM	Trash	plastic, bottles, Styrofoam	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
S-3-130-2	4/24/2014 11:43:59 AM	Trash Construction Materials	empty glass amber bottle, buried metal pipe	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
S-3-131-1	4/24/2014 9:53:02 AM	Trash	glass bottles	Small (<2 feet)	NA	Vegetation	Flat			
S-3-131-2	4/24/2014 11:48:46 AM	Trash	empty glass amber bottle	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
S-3-132-1	4/24/2014 11:50:47 AM	Construction Materials Trash	one empty green glass bottle, empty amber glass bottle, empty clear glass bottle, possible old PVC pipe	Small (<2 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil
S-3-132-2	4/24/2014 9:56:57 AM	Trash	bottles, cans	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
S-3-133-1	4/24/2014 10:00:20 AM	Trash	bottles, cans	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
S-3-134-1	4/24/2014 10:06:07 AM	Liquid Containers	rusted container	Small (<2 feet)	Rusted/Pitted	Vegetation	Hummocky	Yes	0.5	Native Soil
S-3-135-1	4/24/2014 10:14:37 AM	Trash	glass bottles; large rocks around	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
S-3-136-1	4/24/2014 10:20:50 AM	Trash	bottle	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
S-3-137-1	4/24/2014 10:33:06 AM	Trash	rusted metal	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Flat	Yes	0.5	Native Soil
S-3-138-1	4/24/2014 10:45:43 AM	Emty Rusted Drum	rusted, folded and empty drum	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Steep	Yes	0.5	Native Soil
S-3-139-1	4/24/2014 10:57:25 AM	Construction Materials	cement blocks and pieces	Small (<2 feet)	NA	Vegetation	Steep	Yes	0.5	Native Soil

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NA - Not applicable

**Appendix A - Table 4. Surface Refuse Summary-Level 1
Field Reconnaissance Survey Data
Ringwood Mines Landfill Site
Ringwood, New Jersey**

Identifier	General							Hand Auger		
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U-2-149-1	4/25/2014 2:27:56 PM	Trash Construction Materials	pvc pipe	Small (<2 feet)	NA	Vegetation	Flat	No		
U-2-150-1	4/25/2014 2:52:53 PM	Trash	plastic trash in drainage ditch	Small (<2 feet)	NA	Vegetation	Crevice			
U-3-147-1	4/25/2014 2:05:47 PM	Trash	plastic bottle	Small (<2 feet)	Empty	Hummocky	Hummocky	Yes	0.5	Native Soil
U-3-148-1	4/25/2014 2:17:00 PM	Trash	metal planters	Small (<2 feet)	Rusted/Pitted	Hummocky	Hummocky	Yes	1.0	Native Soil
U-3-149-1	4/25/2014 2:22:05 PM	Construction Materials	old PVC	Small (<2 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil
U-3-153-1	4/25/2014 2:16:46 PM	Trash	can	Small (<2 feet)	NA	Vegetation	Top of hill	Yes	0.5	Native Soil Fill
U-3-154-1	4/25/2014 2:20:56 PM	Trash	cardboard box	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
U-3-155-1	4/25/2014 2:50:10 PM	Trash	paper, plastic	Small (<2 feet)	NA	Rocks	Flat	No		
U-3-156-1	4/25/2014 2:52:14 PM	Trash	drainage; cardboard	Small (<2 feet)	NA	Rocks	Stream	No		
U-3-157-1	4/25/2014 2:55:18 PM	Trash	dry drainage; cardboard, part of cement lid	Small (<2 feet)	NA	Vegetation	Stream	Yes	0.5	Native Soil
U-3-158-1	4/25/2014 3:00:28 PM	Trash	trash bags, plastic	Small (<2 feet)	NA	Vegetation	Flat	Yes	0.5	Native Soil
X-1-182-1	4/29/2014 9:38:49 AM	Empty Rusted Drums	edge of cul-de-sac near recycle center - drum remnants one or two/ hard to see	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Hummocky	No		
X-1-183-1	4/29/2014 9:48:24 AM	Empty Rusted Drums	limited access- cut in around recycle center (borough property) inspect from upper road access	Medium (2-5 feet)	Rusted/Pitted	Vegetation	Hummocky	No		
AD-1-1	12/9/2014 3:32:33 PM	Construction Materials	trailer in open field - prior staging area?	Large (>5 feet)	Empty	Vegetation	Flat	Yes	0.5	Fill
AD-1-2	12/9/2014 3:43:07 PM	Construction Materials Trash	lumber and poly sheeting	Medium (2-5 feet)	NA	Marshy	Flat	Yes	0.5	Fill
AD-1-3	12/9/2014 3:51:03 PM	Trash Liquid Containers Construction Materials	trash/household debris	Small (<2 feet)	NA	Hummocky	Hummocky	Yes	0.5	Fill Native Soil
AD-1-4	12/10/2014 10:32:04 AM	Tires	base of backfill pile	Small (<2 feet)	NA	Hummocky	Bottom of slope	Yes	2.0	Fill
AD-1-5	12/10/2014 10:38:08 AM	Trash Construction Materials	asphalt slab, wood and household debris	Large (>5 feet)	Rusted/Pitted	Hummocky	Hummocky	Yes	0.5	Fill
AD-1-6	12/10/2014 10:52:03 AM	Construction Materials Trash	various metal debris	Large (>5 feet)	NA	Hummocky	Hummocky	Yes	0.5	Fill
AD-1-10	12/15/2014 11:42:57 AM	Trash	upper ridge by water	Small (<2 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil Fill
AD-1-11	12/15/2014 1:32:43 PM	Tires	3 tires embedded into mound	Medium (2-5 feet)	NA	Hummocky	Mound	Yes	1.0	Native Soil Fill
AD-1-12	12/15/2014 1:37:45 PM	Tires Trash	edge of mound potential ATV access road	Medium (2-5 feet)	NA	Hummocky	Bottom of slope	Yes	1.0	Native Soil
AD-1-7	12/15/2014 10:17:13 AM	Construction Materials Trash	crane mat; brick; metal	Large (>5 feet)	NA	Hummocky	Flat	Yes	1.0	Native Soil
AD-1-8	12/15/2014 10:39:31 AM	Construction Materials Trash	construction wood and debris	Medium (2-5 feet)	NA	Water	Stream	Yes	0.5	Native Soil

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NA - Not applicable

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Field Reconnaissance Survey Data
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AD-1-9	12/15/2014 11:36:08 AM	Construction Materials Trash	wood pieces	Large (>5 feet)	NA	Vegetation	Flat	Yes	1.0	Native Soil Fill
AD-1-13	12/16/2014 9:15:40 AM	Construction Materials Trash		Large (>5 feet)	NA	Hummocky	Mound	Yes	0.5	Fill
AD-1-14	12/16/2014 10:14:44 AM	Construction Materials	refuse near mounds	Large (>5 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil Fill
AD-1-15	12/16/2014 10:33:36 AM	Liquid Containers Trash	dip in grade	Medium (2-5 feet)	NA	Vegetation	Slope	Yes	1.0	Native Soil
AD-1-16	12/16/2014 10:44:02 AM	Trash		Medium (2-5 feet)	NA	Vegetation	Hummocky	Yes	1.0	Native Soil
AD-1-17	12/16/2014 10:53:04 AM	Liquid Containers Trash		Small (<2 feet)	NA	Vegetation	Slope	Yes	1.5	Native Soil
AD-1-18	12/16/2014 11:03:06 AM	Construction Materials Trash	plastic wrap and metal	Large (>5 feet)	NA	Vegetation	Slope	Yes	0.5	Native Soil
AD-1-19	12/16/2014 11:04:46 AM	Construction Materials Trash		Medium (2-5 feet)	NA	Vegetation	Mound	Yes	0.5	Native Soil
AD-1-20	12/16/2014 11:06:22 AM	Construction Materials Trash		Medium (2-5 feet)	NA	Hummocky	Hummocky	Yes	1.0	Native Soil
AD-1-21	12/16/2014 11:08:05 AM	Construction Materials Trash Liquid Containers		Large (>5 feet)	NA	Hummocky	Hummocky	Yes	1.0	Native Soil
AD-1-22	12/16/2014 11:12:55 AM	Construction Materials Liquid Containers Trash		Medium (2-5 feet)	NA	Hummocky	Hummocky	Yes	0.5	Native Soil
AD-1-23	12/16/2014 11:15:48 AM	Construction Materials Trash		Large (>5 feet)	NA	Hummocky	Slope	Yes	1.5	Native Soil
AD-1-24	12/16/2014 11:24:55 AM	Tires		Medium (2-5 feet)	NA	Vegetation	Slope	Yes	0.5	Native Soil

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NA - Not applicable



Appendix B

Photo Log

Supplemental Reconnaissance Summary Report
Appendix B – Photo Log



Photograph #1

Description of Photograph:
Refuse in Lot A (2.07).



Photograph #2

Description of Photograph:
Iron enriched water pooling from
outfall in Lot B (2.12).

Supplemental Reconnaissance Summary Report
Appendix B – Photo Log

Photograph #3

Description of Photograph:

Mounds along the western edge of Lot B (2.12). View to the west.



Photograph #4

Description of Photograph:

Western edge of Lot B (2.12). View to the north. Lot is bordered by an old access road from the 1970s.



Supplemental Reconnaissance Summary Report
Appendix B – Photo Log

Photograph #5

Description of Photograph:

View to the south along the western edge of Lot B (2.12).



Photograph #6

Description of Photograph:

Soil core of mounds along old access road in Lot B (2.12).



Supplemental Reconnaissance Summary Report
Appendix B – Photo Log



Photograph #7

Description of Photograph:

Border of Lot G (2.15) and E (2.14) where dried paint waste is flagged.



Photograph #8

Description of Photograph:

Pieces of dried paint waste in Lot E (2.14). Pen and soil core used for scale.

Supplemental Reconnaissance Summary Report
Appendix B – Photo Log



Photograph #9

Description of Photograph:

Native forest in Lot D (1). View to the west.



Photograph #10

Description of Photograph:

L2 Recon Area – dried paint waste.
Soil core used for scale.

Supplemental Reconnaissance Summary Report
Appendix B – Photo Log



Photograph #11

Description of Photograph:

L2 Recon Area – dried paint waste. Soil core used for scale.



Photograph #12

Description of Photograph:

L2 Recon Area – cross-section view of the base of the SR-16 area and dried paint waste.

Supplemental Reconnaissance Summary Report
Appendix B – Photo Log



Photograph #13

Description of Photograph:

L2 Recon Area - Same picture as above, but edited on the tablet to show toe of slope and dried paint waste. View to the northwest.



Photograph #14

Description of Photograph:

Lot H (2), view to the southwest.

Supplemental Reconnaissance Summary Report
Appendix B – Photo Log



Photograph #15

Description of Photograph:

Surface refuse in Lot G (2.15),
view to the northwest.